

**COLLABORATION BETWEEN SPEECH AND LANGUAGE THERAPISTS
AND TEACHERS**

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ABSTRACT

Successful collaboration between speech and language therapists and teachers has implications for the delivery of services for children with communication problems. This research is concerned with the ways in which speech and language therapists and teachers work together to help children up to the age of 11 years of age who have difficulties with communication.

A survey was carried out among speech and language therapists working in England and Wales, who either worked in schools or Health Centres. A postal questionnaire was used to collect the information and the responses were analysed using quantitative and qualitative methodology. All the 443 respondents agreed that collaboration was important although this did not always happen. More school based therapists collaborated with teachers than clinic based therapists.

The speech and language therapists in this survey assessed children with communication problems, planned the therapy and then begin to work with the teachers. Therapists who were based in health centres saw this as a way of ensuring a continuation of therapy between clinic appointments. To try to understand the reasons for teachers and therapists collaborating a second set of data was collected using interviews.

Twenty pairs of speech and language therapists and teachers who worked together, were interviewed. In ten pairs, the therapist was clinic based and visited the school and in the other ten pairs the therapist was based in the same school as the teacher. Reciprocity between collaborating dyads was much more common around their increase in knowledge as a result of working together than any other factor. The fact that cognitive gain was one of the chief benefits following collaboration raises interesting issues to be considered in future undergraduate professional education and in-service training.

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INTRODUCTION

This research is concerned with the ways in which speech and language therapists and teachers help children up to 11 years of age who have communication problems. The study investigates current collaboration between these two professional groups.

Patterns of practice vary from one geographical area to the next. From personal professional experience and contact with both teachers and speech and language therapists it became apparent that there was no evidence about the ways in which these two professionals worked together. To assess how much collaboration does occur the current practice of therapists and teachers needed to be examined to see how they initially contacted each other and began a working partnership.

This research took place in a period of turmoil and turbulence for people working in both education and health. Both services were being urged to enter the 'market place'. They were encouraged to promote themselves, to become competitive, more responsive to the consumer. The Health Service faced reorganisation of management systems, the introduction of the concept of purchasers and providers and contracts for service delivery. The profession of Speech Therapy even changed its name in 1991 to Speech and Language Therapy to try and reflect more accurately professional expertise. Teachers were coping with the introduction of the

National Curriculum, testing and Local Management of School and in London the abolition of the Inner London Education Authority (ERA 1988). This research was therefore seen as a dynamic and developmental study into personal patterns of interaction between professionals who are employed by two different services.

Before describing the methodology used to try to discover this information it is necessary to set this research in context by reviewing the associated literature. The organisation of the literature review follows the line of argument as presented in this introduction.

Most children enter school able to communicate ideas, information and respond to questions in the classroom and playground. A skilful language user understands the grammar, vocabulary and meaning of words in a given language. To use language effectively and be a successful communicator knowledge is also required of turn-taking, the awareness of appropriate codes of language and the ability to switch codes depending on the situation and one's own position within a social or work group (Halliday 1975).

A child with poorly developed or limited linguistic skills presents the class teacher with a challenge. For example classroom instructions may be missed because the child has poorly developed attention skills or the child may be

socially immature due to the language difficulties and so may become isolated from peers. Furthermore, in terms of potential academic success or failure, proficiency in oral skills may be considered as essential. Pluckrose (1979) wrote that 'language spoken is the foundation of language written'. Researchers in the States such as Hall and Tomblin (1978) and Aram, Ekelman and Nation (1984), who have carried out retrospective studies with children who have communication problems, considered that these children were at risk of failure in an educational setting.

Professionals have attempted to explain and conceptualise the communication problems of the children they work with using a variety of models. Each model generates its own vocabulary which is used to describe or classify a child's communication problems. These models also influence assessment and intervention procedures.

Bishop and Rosenbloom (1987) refer to the influence of one of the oldest models used for classifying such problems, the medical model, which draws on medical terminology. This was followed by the linguistic model in the 1970's, where language structure including, phonology, syntax and semantics was the main area of attention. Pragmatics, that is the function of language, only became an area of clinical focus in the 1980's. The psycholinguistic model encouraged the practitioner to include aspects such as

attention, perception, memory and processing capacity in the assessment of a child's language difficulties. A fourth model, which might be thought of as an interaction between the child and the environment, has been of value to those working with children who are either deprived of access to language learning situations (Skuse 1993) or those who have severe emotional problems.

The child with a communication problem may be viewed using a variety of models which influence assessment and intervention. Often the practitioner will draw on more than one model to meet the needs of the individual child.

With these different models each generating its own terminology, one can see how the labelling of speech and language problems can cause confusion. The terms 'communication or language disability/difficulty' will be used in this report to cover the whole range of speech and language problems.

Professionals dealing with children who have communication difficulties need to describe the problems the child has as clearly as possible. This is particularly true when professional groups are trying to communicate with each other across the boundaries of health, education and social services. The child with a communication problem may be the concern of many different professionals. Teachers and speech

therapists, the subject of this particular study, are mainly employed by education and health authorities respectively. They go through a different training and work within different organisational systems. This can lead to difficulties when they need to work together with a child who has a communication problem.

Teachers on the whole, are unfamiliar with the role and work of speech and language therapists. According to work by Lesser & Hassip (1986) the initial referral of a child to the speech and language therapist will be via the school nurse or School Medical Officer except when the speech and language therapist is already known to the teacher. This unfamiliarity with the role of the therapist may have an advantage in that the teacher may not have any specific expectations of how they will work together. So the therapist and teacher can begin a working partnership that is not prejudiced by previous negative experiences. They have an option to be as creative as possible in developing their working partnership.

The delivery of a Speech and Language Therapy Service is the responsibility of the Speech Therapy Manager. This person is responsible for the policy and practice within their health district and consequently the deployment of speech therapists. The policies in one health authority can vary considerably from those in an adjacent authority or between

a rural and urban area. This can produce a wide variation in the way speech and language therapy services are delivered. This is reflected in the way the service is provided for children with communication problems who are attending a nursery or a school. Therapists may be based in a health centre, responsible for the speech and language therapy cover to a large number of nurseries and schools, or they may be based in a school or a unit, attached to a school, for a specific number of sessions a week. In some authorities therapists are spending a great deal of time in mainstream schools, either as a result of district policy or through specifically created posts to support children with statements in mainstream school.

The relationship between support services such as speech and language therapy and units / special schools has always been slightly different from the one between mainstream schools and speech and language therapy. In units or special schools therapists are assigned full-time to a school or there is part-time cover provided by one or more therapists. The resulting close proximity and familiarity of teacher and therapist in a particular school can facilitate a working partnership (Thomas 1987, Miller 1989). However this can falter due to lack of support from the head, size of school population, number of staff and timetabling arrangements.

In looking for literature about professionals from different groups working together, an analysis indicated that there was little evidence of any information on this style of working between speech and language therapists and teachers. Information that was discovered tended to be internal reports from individual therapists written for a health authority. There was no coherent body of information on this area. In order to establish what was happening in practice a survey was required seeking information from therapists in a variety of work settings and geographical areas.

By analysing the responses to the survey one was looking for answers to such specific questions as:-

1. How do speech and language therapists respond to teachers concerns about children who have speech and language difficulties ?

How do therapists work with such children and their teachers ?
2. Does the work base of both the teacher and speech and language therapist influence collaboration ?
3. Is there a different pattern of contact and subsequent collaboration for pre-schoolers and school age children ?
4. What form does collaboration between teachers and speech and language therapists take ?
5. How do the knowledge and skills of the teacher and speech and language therapist enable them to meet children's needs ?
6. What are the implications for the delivery of services for children with communication problems ?

To try to answer these questions a survey was carried out.

It was limited to speech and language therapists working in England and Wales, with children up to the age of 11 years. This survey concentrated on the therapists and enabled a detailed description of their patterns of collaboration to be produced. To try to understand why collaboration occurred and even more importantly why it continued a further study was done using an interview procedure

In this second phase of the research pairs of speech and language therapists and teachers who worked together, were interviewed. The interview schedule was designed using two theoretical approaches, Social Exchange Theory (1958, 1964, 1986) and Contact Hypothesis (1954, 1980, 1987). These approaches were chosen because they appeared to offer some explanations for the collaborative interpersonal practices of speech and language therapists and teachers.

The research is presented in the order in which it occurred, the survey followed by the interview. The general and at times common issues related to the methodology used in this research are presented in chapter 4. The detailed development as well as the findings from the the questionnaire used in the survey are presented in chapter 5. In chapter 6 the development and results of the interview procedure are described and in chapter 7 the findings from both stages in the study are discussed.

The first chapter begins with a review of the literature related to communication, the models which have been used to assess and intervene with children who have speech and language problems and the educational implications of communication difficulties. The content of chapter 2 is not a traditional review of literature as such but provides necessary contextual information about the professionals who are the focus of this research. There is a brief historical review of the speech and language therapy profession, the availability of training for teachers who work with children who have communication problems and current patterns of service delivery. In chapter 3 there is a return to reviewing the literature concerned with collaboration and previous patterns of collaboration between these two professionals.

CHAPTER 1

COMMUNICATION PROBLEMS AND THE EDUCATIONAL IMPLICATIONS

The first three chapters of this thesis review the relevant literature and provide background information about teachers and speech and language therapists and how they work together. This inter-professional collaboration is taking place in a climate of change which is currently affecting both education and health services.

The introduction of the National Curriculum (ERA 1988), teacher assessments and standard assessment tasks has altered the way in which many teachers organise and prioritise their work. At the same time senior staff in mainstream and some special schools are grappling with the school's delegated budget as a result of the introduction of Local Management of Schools. Teachers have been coping simultaneously with changes in curriculum content, delivery and the financial budget of the school as well as being urged to 'sell' their school in the 'market place'.

Therapists working in the Health Service are also dealing with market forces. They are having to compete with similar support services to win contracts with their local Trust or District Health Authority, which has now become a 'purchaser'. Speech Therapy Services which were offering a unified service across education and health are now being

split up into smaller units such as Acute services and Community provision. Therapists find themselves being managed by people from other professional groups who are concerned primarily with productivity. The increase in the number of GP fund holding practices has reinforced a pattern of service delivery based on a specific number of contacts or sessions, regardless of the individual child's needs and therapists are having to rethink the ways in which they manage their caseloads.

The increasing uncertainty and insecurity which therapists are feeling about their own professional position is not the best environment within which to foster collaborative working practices. However this research was carried out during this period of change and the potential impact of these changes on the collaborative process will be discussed in the light of the results in chapter 7.

In the next section of this chapter the nature of communication is outlined and the problems that can occur during a child's development. It continues with a description and evaluation of a range of theoretical models which have influenced the assessment and intervention procedures of speech and language therapists. The chapter concludes with the educational implications for children who have communication problems.

In chapter two the focus is on the historical development of the speech and language therapy profession and current training of both therapists and teachers working with language impaired children. Thus chapters one and two provide the information necessary to understand the context for this research. Then in chapter three there is a review of the literature on teachers' views on speech and language therapists, theories of collaboration and recent collaboration between therapists and teachers.

1.1 COMMUNICATION

Communication has been considered in a variety of ways. Denes and Pinson in 1963 proposed 'The Speech Chain' as a way of representing communication in a linear format. This was the first time that acoustic, biological and informational systems were combined in one model to form a speech chain. In a communicative situation it is assumed that a sender transmits a signal to a receiver along a channel of communication.

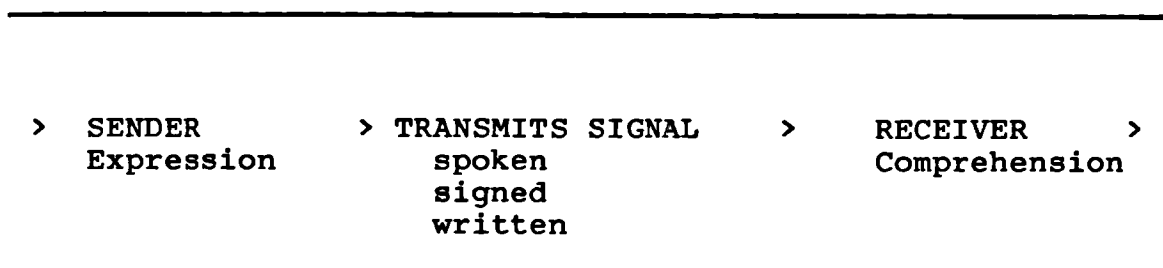


Figure 1. The Speech Chain (1963)

Over a decade later Hardy and Hardy (1977) summarised their thinking about communication in a 'Communicative Chain', which acknowledged its origin in the work of Denes and Pinson (1963). Hardy and Hardy's (1977) model was more inclusive than that of Denes and Pinson (1963) and had 5 stages which can be seen below.

Level I	Brain : phonemic system	Step 1 speaker
Level II	Motor physiology :articulatory (phonetic system)	Step 2 speaker
Level III	Acoustic biophysics : physiological system	Step 3 speaker/ listener
Level IV	Sensory physiology : auditory system	Step 4 listener
Level V	Brain : phonemic system	Step 5 listener

Figure 2. The Communicative Chain (1977)

In the Communicative Chain the sounds, which make up the words, are derived and stored at level I. These sounds are produced/articulated at level II while at level III both the speaker and listener are involved in the way the message is conveyed. At level IV the listener is involved in 'hearing' the message and at level V the message is linked to and deciphered by the phonemic system of the listener. The importance of self-monitoring activities by

the speaker were also acknowledged by Hardy and Hardy (1977).

These two models of communication demonstrate the complex nature of transmitting spoken language between speaker and listener. The reader can imagine some of the potential problems that children with communication problems may have when difficulties occur at any or all levels. In the following pages the background information is provided against which teachers and speech and language therapists have to work when they are trying to meet the needs of children who have communication problems.

Communication can occur without language and some language lacks communicative intent. However, on the whole, social communication occurs through language, for Rutter (1987) says -

'....the main purpose of language is social communication..'

Rutter (1987 p166)

Whatever the situation in which people are communicating with each other Kiernan, Reid and Goldbart (1987) suggest that the successful speaker requires an intact nervous system and speech apparatus, cognitive skills, an appropriate vocabulary, knowledge of word order, a mature sound system and the motivation and desire to communicate.

The listener needs to be able to attend to and concentrate on what is said, to be able to hear the utterances, to interpret the sound waves into meaningful word forms and be able to understand the content of the message.

When people use language to communicate they also convey a considerable amount of information nonverbally. Mark L. Knapp (1978) outlines the importance of nonverbal communication in human interaction. His book is devoted to the study and analysis of nonverbal communication such as gesture, body posture, facial expressions and eye-contact and the development of these abilities. Certain cultural conventions are followed during verbal exchanges. Participants know when to speak and when to listen, they will know how close to stand or sit during the communication act and how much eye contact to make. Knapp (1978) puts forward the view that nonverbal plus verbal communication leads to total communication.

As can be seen the communication act is a complex process which a person begins to learn from birth. Both Bruner (1983) and Wells and Gutfreund (1987) suggest that it is the initial interactions with the significant adults in the child's environment that lay the foundations for future language development. Conversational skills are then practised, added to and constantly refined through the

educational process and the child's contact with their peers and teachers.

1.2 COMMUNICATION AND COGNITION

'The relationship between language and cognition
should be seen as a constructive interaction'.
(Howlin & Rutter 1987 p 271)

Theories of language acquisition range from a behaviourist view point (Skinner 1957) to a nativist theory such as Chomsky's (1959) Language Acquisition Device (LAD) or more recently a social interaction theory proposed by Bruner (1983). In the latter theory Bruner believed that the adult takes a major responsibility for managing verbal interaction. In school the teacher acts as a mediator between the child and the curriculum, using language as the medium for teaching. This Vygotsky (1978) would see as the teacher facilitating future language learning. The teacher helps the child to acquire the language structures which are appropriate in classroom situation and underpin social interaction.

'Children are thus born into a community of
language users and their learning of
language forms part of their socialization
as members of that community'.
Wells (1985 p59)

The quote from Wells (1985) supports the view that language has a social function. Piaget (1962) proposed that language

is a symbolic behaviour which evolved from a general representational skill in children. So the child's cognitive skills are causally linked to the child's language functioning. Thus the child who has learning difficulties may present initially as being slow to acquire language. If one supports this view of a cognitive hypothesis of language acquisition, then children who do not have the necessary cognitive skills which are seen as prerequisites for language, will either fail to develop language or their language development will be delayed.

However, there is another school of thought supported by research evidence from both Furth (1966) and Cromer (1987) that thought processes occur without spoken language acting as a mediator. The research in this area has been done with the profoundly deaf and the physically handicapped population. Initially people did not have the appropriate means to access the thoughts and ideas of this population. An increase in the availability of microtechnology has provided increased support for researchers who demonstrated that even if physically handicapped and blind children did not pass through the same sensori-motor periods as their peers, they still show evidence of language learning.

By the time children enter school at 5 years of age the majority have a complete sound system, the vocabulary and syntax to be able to transmit messages verbally and

interpret what is being said to them. As their concept of time develops along with the associated vocabulary, children are able to talk about events which happened sometime ago. They can move away from the 'here and now'. They are able to give reasons for certain course of action and seek explanations for things they see around them. Unfortunately some children do not automatically acquire language. They are slow to develop or fail to develop the appropriate linguistic abilities.

1.3 COMMUNICATION DISABILITY

Leonard (1981) and Byers Brown and Edwards (1989) described children who have communication problems as a heterogeneous group. The problems they have with speech and language range from a minimal disturbance in the sound system, to a severe and specific language disorder which requires specialised therapeutic and educational provision. As a communication problem can manifest itself in so many ways it is hardly surprising to find that there are a variety of ways of describing language disability. These descriptions tend to be grouped largely around certain models. These will be explored in the following section of this chapter.

'Communication disorders will be more or less handicapping depending upon the importance which society attaches to a particular communication skill. Communication handicaps

are therefore in a very real sense the products of the whole community not simply the person who has the disorder'.

Byers-Brown & Gilbert (1989 p.53)

'Language disability is not a matter of life or death. It's not like cancer or heart disease. Children survive - but to what kind of life ? Without the right kind of help at the right time, children can arrive at school socially isolated and linguistically quite unprepared for the demands which will be made upon them'.

Crystal (1986 p. 221)

The College of Speech and Language Therapists define a language disability as :-

'A disability of the content, form and use of language skills, found within a developmental profile which will affect communicative competence to varying degrees, from mild to severe, in the contexts of listening, speaking, reading and writing'. (1988)

The Association For All Speech Impaired Children (AFASIC), a parent support group and pressure group, describe a language disability as a 'hidden handicap'. This term is used because a language problem is not immediately obvious when you meet a child with such a difficulty but it can be an extremely pervasive problem. A wide range of problems can be included in the term 'language disability' ranging from an occasional difficulty with certain consonants, to a child who is unable to communicate using verbal labels. A language disability may co-exist with other physical or cognitive problems. For many children a language disability will be their primary problem but for others, it will be a

secondary difficulty. There may be changes in the way that the child is described as they move into school, Lynn Snyder (1984) suggested that, in America, children with language disorders are re-defined as 'learning-disabled' on entry into elementary school. Although Aram and Nation (1982) state that trying to conceptualise children with language difficulties as a homogeneous group is 'an exercise in unreality'.

1.4 MODELS

To deal with this heterogeneous group of children and the diversity of problems exhibited by them, professionals have tried to represent these difficulties in a meaningful way by using a variety of models. These models, which are proposed by researchers from different disciplines, are used to describe the disability and to some extent the cause. The models described here include medical, linguistic, psycholinguistic and an interactive child /environmental model. The diversity of approach represented by these four models reflects the multi-faceted nature of communication problems. The fact that no single model can explain speech and language difficulties reinforces the complexity of communication problems and underlines the fact that different approaches may, with equal possibilities of success, be considered when planning intervention. The ways in which each model influences assessment and intervention

will be considered in this chapter as well as their value to both speech and language therapists and teachers.

1.4.1 A MEDICAL MODEL

Phillip Williams (1991) describes the medical model as one in which there is a belief -

'that learning and behavioural problems are analogous to diseases, located in the child, characterised by recognisable and specific symptoms, and once diagnosed, treatable by acknowledged methods'. (p. 260-1)

People using this model can attempt to diagnose a communication problem from the observable physical or behavioural signs (symptoms). The type of intervention (treatment) is then recommended on the basis of the diagnosis. The medical model is also used when a known medical / neurological problem exists and the accompanying communication difficulties are seen as associated symptoms, as when a child is diagnosed as having cerebral palsy. It is more commonly used or believed to be used by speech and language therapists rather than teachers.

In the 1950's and 1960's significant figures in speech pathology such as Helmer R. Mykleburst, Mildred A. McGinnis and Muriel E. Morley based their classification of child language disorders on the work done in adult aphasia. Adult

aphasia is a conceptualisation of acquired language disability based on the site of anatomical damage. Using this model the following labels were developed and applied to children's communication problems- 'dysphasia, developmental dysphasia and congenital aphasia'.

The value of such labels, when used for a child whose language has failed to develop, is questionable. In an adult who had a mature language system, injury to the brain can produce a significant change in both spoken or written language. Most children with language problems are still in the process of developing their language system so these labels may be inappropriate.

Although for professionals such as Peggy Ferry (1981), a neurologist, disturbances in the speech and language system may be the only indication that someone has a neurological problem. She stated this while she was studying the normal patterns of brain development, hemispheric asymmetry and specialization and developmental disorders.

Recently the medical model has been a focus of attention as a result of interest in the possible genetic causation of specific communication problems being investigated in the United Kingdom. In Middlesex a three-generation family are being studied by clinical geneticists. Sixteen members of the family have a severe developmental verbal dyspraxia,

several of them have attended a local language unit (Hurst, Baraitser, Auger and Norell 1990). The affected members all had serious communication problems. There are non-affected members of the family. The initial report from the genetics clinic suggests that at least one type of dyspraxia is inherited.

The medical model is limited to looking at factors within the child and the use of a medical label can lead people to have low expectations for a child with a specific medical condition. Bishop & Rosenbloom (1987) take the view that the labels used with the medical model are erroneous. This is because these labels imply a single condition, when in fact several sub-groups may be in existence. Two experienced clinicians and researchers, Byers Brown & Edwards (1989) warned that contradictory results may appear in the research literature because the same label is used for several different populations.

1.4.2 ASSESSMENT USING A MEDICAL MODEL

When assessing a child's communication problems using the medical model, the child's language system will be analysed after examples of the child's speech and language have been collected. Information will also be gathered from family and school. The signs and symptoms of a child's communication problem are compared to others already known,

to arrive at a diagnosis. Any factors of an organic nature will lead the therapist to make a referral to a medically qualified professional. Such factors would include the information that the child is a mouth breather, has constant colds and likes the television turned up loud. This could indicate hearing problems. A child who is very clumsy or slow to achieve motor milestones could indicate a neurological impairment.

If a diagnosis of 'delayed language' is made, the professional using this model will try to establish the causative or contributing factors. The aim is to try if possible to eliminate or at least reduce the influence of any organic factors. If a child has a conductive hearing loss which is thought to be contributing to a speech and language delay, antibiotics and/or surgery may be used to re-establish an acceptable level of hearing.

1.4.3 INTERVENTION USING A MEDICAL MODEL

If there are clear contributing medical/organic factors, these can be dealt with in a hospital or clinic setting by medically qualified personnel. The speech and language therapist may in some situations wait for a medical procedure to be complete before intervening while in others they will follow the recommendations of authors such as Coombes (1987) and Evans-Morris (1982) to intervene early.

Thus mealtimes for children who have cerebral palsy will be used to encourage turn taking and the development of pragmatic skills as well as lip control.

The 'within child' medical model does not provide a description of the child's language impairment. For both therapists and teachers it does not provide any indication of the child's communicative strengths and weaknesses or where intervention may begin. Even when information is gained from the medical profession about a child's physical state, in many cases this does not help teachers and therapists to know what to do next.

Teachers often believe that speech and language therapists work exclusively within this model because they use terms such as 'diagnosis, intervention / treatment'. Whilst speech and language therapists may automatically include at least a brief consideration of any physical factors which may contribute to a child's problem. The use of a medical model as a point of reference does represent a clear distinction in the training and practice of these two professional groups. However, it is noticeable that therapists who work in schools do not normally, use the term 'patient' when talking about the children they see. They use terminology which is more appropriate to an educational environment.

Although organic factors can contribute to a communication problem there are many cases where children have communication difficulties in the absence of demonstrable physical problems. An alternative model to draw on in such a situation is a linguistic model.

1.4.4 A LINGUISTIC MODEL

In the mid 1970's information from research in the field of linguistics begin to influence teachers and speech and language therapists working with children who had speech and language problems.

This model was largely created by the work of linguists who followed on from Chomsky (1965) and revolutionised the way researchers looked at language. Linguists in the United Kingdom, such as Crystal, Fletcher and Garman (1976) have collected a great deal of data about early language acquisition and the way in which clause and phrase structure developed. In an attempt to integrate knowledge about language use with the structure of language Bloom & Lahey (1978), working in the United States of America, developed their model of form, content, and use. This model provided the professional with a means of conceptualising the different aspects of language that need to be considered when assessing a child's language abilities. It also encouraged people to think about the interaction between

different aspects of language and thus the implications for children who have problems with certain aspects of their language structure or use. The Bloom & Lahey (1978) model made therapists who were clinic-based aware of the limitations of their observations of language use when seeing a child in isolation at a health centre. Therapists and teachers working with groups of children in schools had many more opportunities for observing and collecting data about a child's use of language as well as a broader range of examples. Bloom and Lahey's work was consistent with the shift of emphasis when analysing language from the structure to the social context in which language is learnt (Wells 1981).

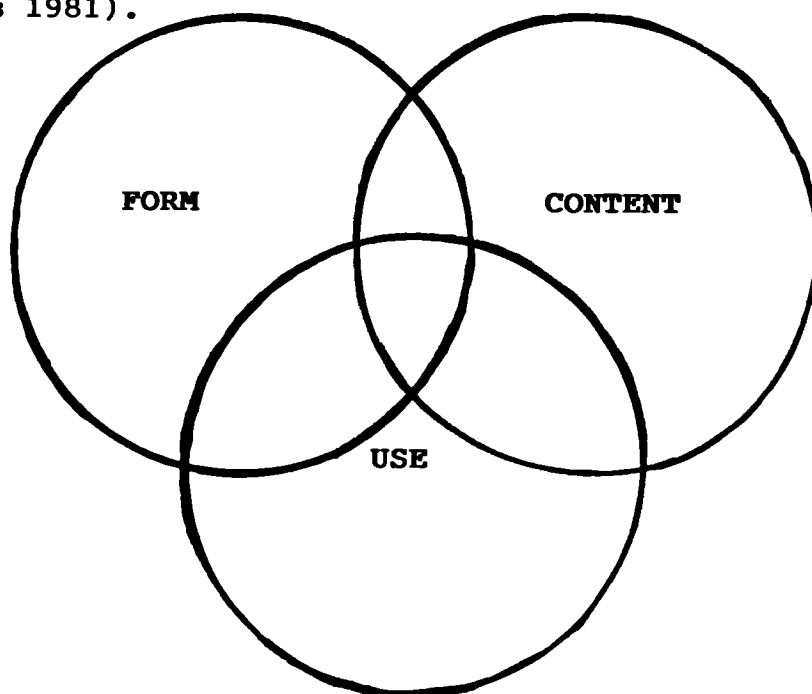


Figure 3. Model of Language, Form, Content and Use.

Bloom & Lahey (1978)

In recent years Prutting & Kirchner (1987) and McTear & Conti-Ramsden (1992) have investigated the 'context of interaction'. They have studied the way conversational structure develops and tried to identify how breakdown in conversation is repaired. All these authors have suggested ways of evaluating how language is used in a communication situation.

By collecting samples of spontaneous conversation between a child and adult or two children and analysing them using a linguistic framework, inferences may be drawn about the child's linguistic competence. Both output (expression) and input (comprehension), are considered at the following levels :-

- Phonology** - range of sounds used in a given language
These sounds, together with intonation, voice, and fluency may be referred to as SPEECH.
- Syntax** - ordering of words into phrases/sentences
- Semantics** - study of how meaning is structured in language
- Pragmatics** - 'factors that govern users' choice of utterance, arising out of their social setting'

Crystal (1987 p.49)

The information gained from both a detailed recording of how children develop language and an analysis of their utterances, provides information about the way language develops. Information from longitudinal studies of language development such as that carried out from Bristol University

(Wells 1981), has provide a basis for teachers and therapists planning language intervention work.

Children with language disabilities, who are described using a linguistic model, may be labelled as having a 'phonological, phonologic-syntactic disorder or semantic-pragmatic disorder'.

The use of this model has led to the label 'language disorder' being used as a generic term. In an attempt to indicate that the language difficulty is the primary problem, the label 'specific' has been added. The use of such a term is in keeping with 'diagnosis by exclusion', as suggested by Bishop (1979). She stated that in such a case all other factors which could contribute to the language or communication problems had been ruled out following extensive assessments. Thus the difficulty that a child has with communication is a 'specific' problem.

Those who use this model when assessing and teaching children with communication problems proceed in the following way.

1.4.5 ASSESSMENT USING A LINGUISTIC MODEL

A sample of the child's language will be collected and a linguistic analysis will focus on the linguistic structure of a child's language. This will lead to the development of

a profile of the child's skills at the phonological, syntactic, semantic and pragmatic level. The professional is concerned with the 'observable' patterns of linguistic behaviour.

The linguistic model has given rise to a range of assessment procedures. The phonological system can be assessed using the Phonological Assessment of Children's Speech (Grunwell 1982). This assessment is rule based and maps the child's utterance on to the adult model. This uses pre-selected pictures to collect a sample of 200-250 words for analysis. This procedure is commonly used by speech and language therapists who have studied phonetics during their training. The Language Acquisition Remediation and Screening Procedure (LARSP) was developed in the linguistics department at Reading University by Crystal, Fletcher and Garman (1976) to analyse the syntactic structures in a sample of spoken language. This approach made a system of linguistic analysis available to both teachers and therapists. It has been used by both professional groups when working with language disordered children. Recently Dewart & Summers (1988) developed an interview schedule to use with parents to collect data about the pragmatic aspects of a child's language. This procedure is used by a variety of professionals

The collection of data leads to a detailed analysis using a linguistic model and provides indications of what a child can do as well as areas where they need to develop new knowledge and skills. Using the information from the analysis an intervention strategy can be formulated.

1.4.6 INTERVENTION USING A LINGUISTIC MODEL

The area of intervention may have been decided upon after using the Bloom and Lahey (1978) model of assessment or a profile of the child's linguistic performance will lead to decisions about where to focus therapy. The Bloom and Lahey (1978) model has considerable value when explaining the purpose of intervention strategies in a multi-disciplinary team. It is easy to demonstrate a child's linguistic strengths and weaknesses using the model.

Davidson, Parker and Stone (1984) report the use of LARSP as a strategy when working on syntax with profoundly deaf children. Howell and Dean (1991) advocate a metalinguistic approach to phonological problems. The child is required to reflect on aspects of the sound system such as, friction, plosion and voice/voiceless distinctions.

Specific techniques that are used with a linguistic model include expansion of the child's utterance by the adult, completion of a child's abbreviated response and forced

alternatives (Crystal et al. 1976). Forced alternatives provide a child with a choice between two responses such as 'Do you want a blue cup or a red cup ? Is the boy in the picture running or jumping ?' These strategies are used by both teachers and therapists.

Although the linguistic model can provide considerable detail about a child's linguistic strengths and weaknesses, it does not take into account the factors which may interfere with language development and language use. David Crystal (1980), a linguist, criticized the model as it describes language in a static way. He recommended the inclusion of a developmental perspective as this provided a context for viewing language and any disability which may occur. Crystal felt that without a developmental slant on this model it 'views linguistic disability as a static phenomenon; the handicap is described 'synchronically' at a hypothetical point in time'.

Freeman (1987), a psychologist, heavily criticised Crystal's book 'Linguistic Encounters with Language Handicap' (1984), for ignoring the theory of mind, mental reality and the influence of psychology. Aspects such as memory, sequencing difficulties and poor attention are not represented in this model. These cognitive aspects are also the concern of teachers. They would agree with speech and language therapists that information from another field of study,

that of psychology, is needed to provide additional details to the picture that is being developed of the child's language abilities. The bringing together of linguistics and psychology results in - psycholinguistics.

1.4.7 A PSYCHOLINGUISTIC MODEL

Psycholinguistics developed as an area of interest in the 1960's, bringing together research from linguistics and psychology, lead by psychologists who adopted the research information from linguistics. As in the linguistic model the structure and function of language are clearly expressed, but it also incorporates the processes of : -

'listening, speaking and the acquisition of these two skills in children'.

(Clark & Clark 1977)

Clark & Clark (1977) state that a significant notion in psycholinguistics is that language is for communication. This highlights the difference between this model and the linguistic model, which focuses primarily on the structure of a language.

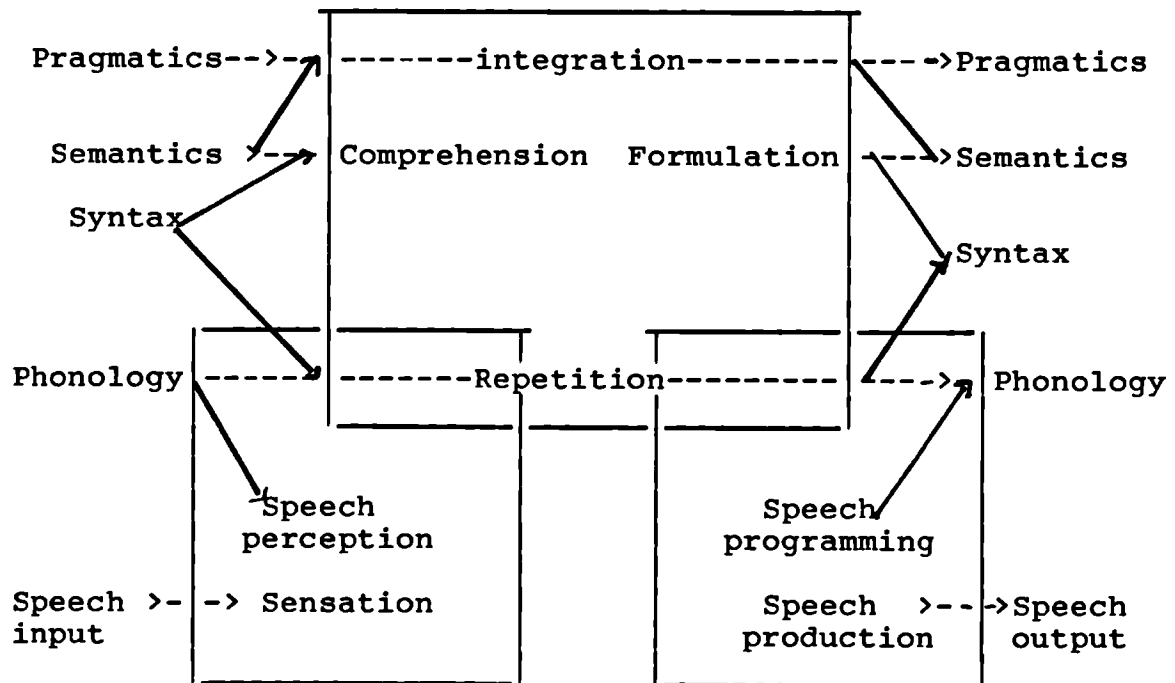
Using a psycholinguistic model, language disability is described using linguistic terms but psychological factors such as attention, perception and memory are also included in an analysis of a child's strengths and weaknesses. The

interaction of all these aspects is also considered and information processing models are used. Both verbal comprehension and expression are envisaged as taking place along a processing chain.

Dorothy Aram and James Nation in their book 'Child Language Disorders' (1982) propose a Child Language Processing Model (CLPM) as represented in figure 4.

OBSERVABLE RESPONSE TO LANGUAGE OBSERVABLE USE OF LANGUAGE

2. Language to thought to
language processing



1. Speech to language processing 3. Language to speech processing

Figure 4. Child Language Processing Model
(Aram & Nation 1982)

The Aram & nation (1982) model suggests that the analysis occurs in 3 different segments. The three hypothetical segments :-

1. Speech to Language Processing.

There are at least two processing stages within this segment - sensation and perception. Sensation refers to the intensity and frequency of sounds heard. Perception converts the acoustic signals into a speech code. Speech perception is made up of auditory attention, discrimination, memory and sequencing.

2. Language to Thought to Language Processing.

The speech code, processed in segment 1, is interpreted in this segment. This includes speech and language repetition which may or may not be meaningful. Language comprehension implies that the listener has analysed the words and sentences in the message. In language integration the message is interpreted in the light of past experience and cognitive ability. It also serves as a source of ideas to be communicated. Language formulation involves the selection, retrieval and organisation of words into an appropriate language structure.

3. Language to Speech Processing.

Here speech programming and production are involved. Speech programming organises the information into a phonological

code and provides the conversion from such a code into a set of motor commands ready for production. At this point the speech response is initiated, coordinated and produced.

In considering this model something of the complexity of human verbal communication is apparent, illustrating the number of places where spoken language can break down.

1.4.8 ASSESSMENT USING A PSYCHOLINGUISTIC MODEL

Researchers such as Stackhouse and Wells (1993) have utilised the psycholinguistic model to assess the language problems of Zoe, a girl with a severe and persisting speech and language disorder at age 5 years 11 months. They believe that the clinician can begin to identify where linguistic breakdown occurs and 'a profile of the strengths and weaknesses of an individual child can be constructed'.

Assessment, using a psycholinguistic model, will include all the areas considered when using a linguistic model. But in addition, information will be sought about a child's abilities in areas such as auditory discrimination, sequencing skills, short term and long term memory and the child's learning style.

Communication disability is described using linguistic terms but psychological factors such as attention, perception and memory are also included when describing a

child's problem and considering the most appropriate type of intervention.

1.4.9 INTERVENTION USING A PSYCHOLINGUISTIC MODEL

Leonard (1981) reviewed a series of intervention strategies with specifically language impaired (SLI) children including, imitation, modelling, expansion, focused stimulation, general stimulation and comprehension based approaches. A major theme is that there is little generalisation of specific structures that are taught. Leonard (1981) also believed that the skills necessary for every day interaction had not been a focus for recent research.

Kirk, McCarthy & Kirk (1968) devised the Illinois Test of Psycholinguistic Ability (ITPA) which is based on the premise that language can be broken down into specific linguistic skills. The authors believed that these skills can be identified, assessed and if a child is seen to have a deficit in a particular area, then specific remediation can be given. However, critics such as Norma Rees (1980), question the assumption that linguistic skills can be broken down in this way.

Authors such as Cooper, Moodley and Reynell (1978) used an intervention approach which focused on a child's

prerequisite skills, that is those skills necessary before language can be acquired. They assessed and carried out an intervention programme on children's attention skills, symbolic understanding and concept development. Using this approach Cooper et al.(1978) found that children with delayed language development made considerable progress despite the fact that there had been no specific work aimed at improving their linguistic skills.

When working on phonology using a psycholinguistic approach the therapist primarily focuses on the perceptual component. It is crucial that the child can hear the difference between their own pronunciation and that of the target word. Although as Leonard (1985) points out breakdown can occur at any stage in the processing chain.

'Differences between the adult form and the child's stored form may be the result of perceptual encoding rules or a failure to adequately store in memory less familiar though correctly perceived phonetic details. ... output constraints may be the result of the child's limited ability to hit particular articulatory targets.. '

(Leonard 1985)

The use of psycholinguistic models provides a link between linguistics and psychology. The majority of a communicatively impaired child's strengths and needs can be identified using a psycholinguistic model. But for some children their emotional needs may contribute to or even arise from a communication problem. The previously described models do

not explain such problems. But for a teacher and a therapist in a classroom a child's emotional and behavioural difficulties may be the first sign of a potential problem. There is a need for a model such as an interactive /environmental one where emotional issues are taken into account when assessing a child's communication problems.

1.4.10 AN INTERACTIVE CHILD / ENVIRONMENTAL MODEL

A child whose communication skills are slow to develop or fail to develop may become frustrated or withdraw from social situations. The environment in which a child is brought up can influence the development of language. If a child is neglected and understimulated, linguistic skills may fail to develop.

PATTERNS		EXAMPLES
I	Psychiatric disorder > Language problem	Elective mutism
II	Language problem > Psychiatric disorder	Socio-emotional problems 2nd to Specific LD
III	> Psychiatric disorder > Language problem >	Autism
IV	> Psychiatric disorder > Language problem	Environmental privation
V	> Psychiatric disorder > Language problem	Mental handicap

Figure 5. Psychiatric disorders and language problems (Rutter & Lord 1987)



Some of the patterns of association between language impairment and psychiatric disorder are represented in figure 5 on the previous page.

Pattern I - In the pre- school years the label 'elective mute' is often applied to children seen in day nurseries or at developmental checks. A child diagnosed as an elective mute is often thought to be linguistically competent but they do not demonstrate their linguistic skills. It may be that they converse with only a few people and/or in only a few situations (Kolvin and Fundudis 1981).

II -The second example demonstrates the problems that can arise when a child has a severe and specific language problem. Cantwell and Baker (1987) looked at 600 children with communication problems. They divided these children into 3 groups, those with speech problems, those with speech and language problems and those with language problems. Their investigations indicated that children with just a speech problem were least likely to have any psychiatric disorders. The group with speech and language problems and the group with language problems had a higher incidence of psychiatric problems.

In America 'attentional deficit disorder' is listed under psychiatric problems. The majority of children identified in

the pre-school years as language delayed also have attention difficulties (Cooper, Moodley and Reynell 1978).

III - The third pattern, where autism is included, illustrates a situation where psychiatric disorder and language delay may not be causal. However, they may both co-exist in a child diagnosed in such a way. The language delay, is seen as part of a broad cognitive impairment (Wing 1981, Frith 1989).

IV -In the fourth pattern children may suffer either a language or psychiatric problem if extreme deprivation occurs. The Koluchova twins (Koluchova 1972,1976) were discovered when they were over 7 years old. At that time their cognitive skills were at a 3 year level. Despite their early deprivation they made considerable cognitive and linguistic progress when moved to a foster home. There does appear to be an age limit after which progress is not as rapid. Genie (Curtiss 1977) was discovered at 13½ years of age. She made progress but her linguistic skills remained limited.

Fox, Long and Langlois (1988) reviewed the ability of abused /neglected children on 3 tests of comprehension and compared their performance with a control group. The control group were nonabused children from similar socio-economic backgrounds and English was also their first language. The

abused /neglected group performed poorly on comprehension tasks, but it was the severely neglected that scored the lowest in all the 3 areas assessed. But Skuse (1993) suggests that evidence indicates that in the 'absence of genetic or congenital abnormalities and gross malnourishment, victims of such deprivation have an excellent prognosis' (p. 46).

V -The final association illustrates multiple interconnected causal processes. A language problem may arise from the learning difficulty as may a psychiatric disturbance. With severe learning difficulties language and psychiatric problems may be due to specific brain damage.

This model reminds one of the link between cognition and language. Without appropriate stimulation cognition and language skills are severely affected. A professional using this model will also need to describe the linguistic skills of such children so their progress can be accurately measured and draw on knowledge from psychology regarding the development of attention, memory and sequencing.

1.4.11 ASSESSMENT USING AN INTERACTIVE CHILD/ENVIRONMENTAL MODEL

Professionals using this model will carry out detailed observation focussing on the child's situation and contexts

in which communication occur. As in the use of other models interviews are often held with parents and other family members and taking a case history is an important aspect of the process.

Psychometric assessments may be used as well as objective tests of hearing ability, in order to identify the child's primary problem. Rutter (1987) stresses the need to differentiate between learning problems, hearing loss, language difficulties and psychiatric disturbance. For children who have been severely neglected or abused, the initial testing may need to focus on non-verbal responses and take considerable time until the child trusts the professionals carrying out such assessments.

1.4.12 INTERVENTION USING AN INTERACTIVE CHILD/ENVIRONMENTAL MODEL

There is no necessary connection between language delay and psychiatric disturbance. It does not appear as though any one form of treatment can be recommended.

Use has been made of Skinner's Verbal Behaviour (1957) model, when strategies such as imitation, modelling, fading, prompting, shaping, chaining and reinforcement are used. These approaches enable the adults to reinforce a child's

attempts at communication however tentative they may be initially.

Similar strategies were successfully used in a research project with autistic children. They had been taught to the parents of 16 autistic children (Howlin and Rutter 1989). This was during an 18 month long home-based intervention programme. Behavioural techniques and developmental teaching approaches were used to plan an individual programme for each child. Both the maternal speech and the children's speech were assessed prior to the intervention and then at 6 monthly intervals.

The authors state that prior to the intervention there was no evidence that parents were failing to interact adequately with their children. However, after the training, there was an increase in interaction and especially in the mothers' use of utterances that elicited or responded to the utterances of the child. The effects of this type of intervention are most noticeable in the early stages.

As models have been developed mainly by researchers and applied by practitioners, it became obvious that earlier models had been unsuccessful in considering the whole child. There had been a tendency to look at one particular aspect of language disability, such as its etiology, structure or emotional implications. Professionals using

other models have had to consider several aspects of the linguistic process. Although all theoretical models still require the teacher or therapist to use their own knowledge to ensure that the whole child is considered.

SUMMARY

The models outlined in the previous section have informed and influenced professional practice. They are used to identify, assess and manage children with communication problems. Their diversity illustrates the complex nature of such problems and the different approaches which may be used by teachers and therapists. However, they should not be seen as mutually exclusive. Different elements of each model may be used by both teachers and therapists depending on a child's communication difficulties to enable them to gain a more complete picture. The models enable professionals to try to conceptualise speech and language problems in a meaningful way. To some extent the setting in which the professionals work will influence the models they use. Therapists working in health service settings may refer to the medical model often, whereas school based speech and language therapists may only use specific aspects of this model. Teachers rarely refer to a medical model. Teachers who have been working for some time with children who have communication problems are more likely to utilise a linguistic model, although they may still rely on the

therapist for detailed phonetic and syntactic descriptions of a child's utterances. Both teachers and therapists are more likely to work within the psycholinguistic and interactive child/environment model than any other theoretical model. These two models offer the link between educational and therapeutic practice.

For teachers the introduction of the National Curriculum (ERA 1988) increased the focus on oracy skills and also the possible problems that some children may have in this area. A child who has language difficulties may fail to achieve their full academic potential. The following studies indicate some of the links between language disability and educational failure.

1.5 EDUCATIONAL IMPLICATIONS OF COMMUNICATION DISABILITY

In this section studies which have tried to relate language impairment to later educational achievement will be reviewed. The majority of the the studies, both in the United States of America and in Britain, were retrospective. Some recent prospective studies are included.

It is apparent when reading these studies that in the last twenty years confusion has occurred following changes in the terminology used to describe language disability. This is highlighted in a study by Paul and Cohen (1984), who

believed that the children they followed-up from childhood to adolescence would have been diagnosed as 'learning - disabled' in the 1980s. The children's difficulties included problems with language organisation and word-finding which made school work extremely difficult. When they were first seen these children were labelled 'aphasic'. Changes in terminology make it difficult to ensure that the same problems are being described from one decade to the next. However, in spite of such difficulties a review of retrospective studies, as described below, is relevant to this research.

One of the earliest studies carried out in Britain, was published in 1973 by Garvey and Gordon. They found that about 50% of the children with speech disorders, which they followed-up, showed associated learning difficulties. However, the population of communication disordered children which they studied, was very varied and this made it difficult to draw any firm conclusions from the study.

This problem of a mixed population was also true in the study by Sheridan and Peckham (1975). They followed up 215 children from the National Child Development Study. These children had been identified as having marked speech problems at 7 years of age. Sheridan and Peckham (1975) investigated these children when they were 11 years old and in their last year at primary school.

In this study three reports were obtained about each child. A social report from the health visitor, who interviewed the parents, a report from the teacher and a medical report.

The authors managed to trace 190 children out of the original 215. The most recent reports were compared with earlier reports and the current status of the children was established.

Out of the 190 children 66 had been formally 'ascertained' for 'special educational treatment'. Of the 124 children in ordinary schools, 69 children were considered to have residual speech problems and 55 were reported to have satisfactory speech. An interesting point was that nearly half of the group reported to have satisfactory speech were in fact receiving extra help at school.

The results of this study are based on reports from professionals who saw the children in school. The children were not reviewed personally by the authors. Teachers were asked to identify and comment on any children with speech problems. The authors of the article were therefore reliant on the accuracy of the teachers' report. The teachers' accuracy was dependant on their ability to be aware of and identify speech problems.

In the doctors' reports 'mild spina bifida, cleft palate, and heart defect' are mentioned. This alerts the reader to the possibility that for some of the children in mainstream schools, a 'speech defect' may not be their primary problem.

In this study it is not clear whether a communication difficulty was a primary or associated problem. In fact both children with residual speech problems and those with satisfactorily resolved 'speech defect', appear to have continued problems in school.

Sheridan & Peckham's (1975) study also illustrates the difficulty that can arise when results are being interpreted after there has been a change both in terminology and in the conceptualisation of language problems. When this study was carried out, the research emphasis in linguistics was on language structure with particular emphasis on syntax. In clinical management the emphasis was also on language structure but the focus, as in this study, was on speech problems or articulation. So it is difficult to interpret precisely how the term 'speech defects' was used in this study. It can only be assumed that children with syntactic, semantic or pragmatic problems were not included under this label. So only a small proportion of the children who may have been having difficulty due to communication problems were identified in this study. As the children who were

identified were having marked problems in school, it does indicate the potentially far reaching effects of a communication problem on a child's progress in school.

Children with both 'speech defects' and language difficulties were included in a study by Hall and Tomblin (1978) in Iowa, USA. The authors contacted 36 language and articulation impaired clients, thirteen to twenty years after their initial contact with a speech and hearing clinic. By this time the clients were in their early 20s. Again, in this study, the authors did not meet the subjects. The data collected were based on returned questionnaires from the client's parents and access to the Iowa Testing Service. The Testing Service provided information about the academic achievements of these young people.

The 36 subjects were assigned to one of two groups on the basis of their past records. One group was called 'language impaired (LI)' and the other was called 'articulation impaired (AI)'. The authors acknowledged that at the time these clients were being seen in the clinic (1955 - 62) the diagnostic label 'language impaired', was not in common use.

There were 18 subjects allocated to the LI group and 18 to the AI group. Of those allocated to the LI group, 9 young adults were believed by their parents to have residual

communication problems. Only 1 person from the AI group was identified as having a residual problem. The young people in the LI group had always had a poorer performance on academic tasks, than the AI group. This was especially noticeable in reading. The results of this research still indicate that the subjects who had language problems, also had academic problems.

The results of this study, like the Sheridan & Peckham (1975) study, are difficult to interpret due to the way the data were collected. For example Hall & Tomblin (1978) did not include copies of the questionnaires sent to the parents in the article. The authors felt that speech therapy input was not seen as a significant difference between these two groups. This was probably because, at the time, that these young people were receiving therapy, the emphasis was on articulation work whatever a child's problems.

The impression that children with communication difficulties also have academic difficulties is confirmed in the book Developmental Screening and the Child with Special Needs (1983). The authors of the book, Drillien and Drummond (1983) carried out a longitudinal study in Dundee, Scotland. The aim was to ascertain the frequency of neurodevelopmental disabilities in a population of 5,334 pre-school children.

The authors found an incidence of speech disorders of 5.6% in the pre-school population. This figure rises to 7.5% if those are included where speech difficulties are a secondary problem.

A questionnaire was sent to teachers, when the children had been in school for 18 months to 2 years, asking about the children's academic achievement. There was an association between articulation problems and poor school achievement. This association was even more marked where children were also thought to be socially disadvantaged.

In reporting these results the authors use the term 'speech disorders'. It is not clear at this point in their book whether they are choosing to use this label to include both speech and language problems or just articulation difficulties. However, in early chapters, they indicate an appreciation of the vast area covered by terms such as 'speech disorders'. So one may conclude that 'speech disorders' was being used as a general term.

Another longitudinal study has been carried out by a multidisciplinary team in Dunedin, New Zealand (Silva, McGee & Williams 1983). In this study 857 children have had their language skills assessed at 3, 5 and 7 years.

The authors made a distinction between children with a :-

language delay at only 1 age - 'transitory language delay'
language delay at 2 ages - 'moderately stable delay'
language delay at all 3 ages - 'stable language delay'.

168 children out of 857, had a language delay at one or more of the assessments. Silva et al.(1983) found that a general language delay was more stable over time than a specific delay affecting either expression or comprehension. This stability may be due to the fact that a language delay could indicate a general delay. Indeed the following findings would support this view.

When the authors looked at the numbers of children who had low IQ or reading difficulties at 7 years old, between 45.8% and 68.2% had had a language delay at 3 years old. The more stable the language delay, the greater the prevalence of later low IQ and reading difficulties. The authors also pointed out that some children who were not delayed at 3 years were identified as language delayed at a later stage.

If a child has a very specific communication problem such as 'developmental verbal dyspraxia', there is evidence that they have difficulty with particular learning strategies; for example, Snowling and Stackhouse (1983) demonstrated that such children have difficulty using a phonetic spelling strategy. These children, with a specific communication problem, had more difficulty with tasks of imitation,

spelling and reading than would have been predicted by their reading ability. Their spelling errors suggested that they had difficulty segmenting speech for spelling because they were unable to reflect on their own articulation. These results also supported earlier work by Stackhouse (1982), suggesting that these children had great difficulty carrying out grapheme-phoneme conversions. Difficulty in these areas can increase the risk of reading and spelling failure. Stackhouse and Snowling (1992) followed up two children they had seen four years ago. This time the children were 14.6 years and 15.8 years and they still had marked speech problems. They also had continued difficulties in reading and spelling supporting a link between spoken language problems and literacy.

Paul and Cohen (1984) also report on a group of children who were identified as having a specific communication problem in childhood. The 18 subjects in this study had all been labelled as 'aphasic'. At the time of this study the average age of the group was 14.2 years. The subjects included 11 who had been diagnosed as having a 'developmental language disorder' (DLD) and 7 who were described as 'atypical' DLD (ADLD). The ADLD group had associated social difficulties but these were not severe enough for a diagnosis of autism to be made. The young people were seen for a battery of assessments. Their communicative competence was rated, while they interacted with parents and examiners. The

people who had been trained to rate the subjects' communicative abilities did not know whether the person they were observing was in the DLD or the ADLD group. Parental questionnaires were used to elicit information about the children's behaviour. The children with high IQs had problems with language organisation and word-finding. Those with low IQs continued to have speech and language difficulties and the ADLD group were still seen as socially 'different' from others but not classifiable as autistic. All these children, identified in childhood, had continued to have language and learning difficulties into adolescence.

A group of children who were reviewed by Aram, Ekelman and Nation in 1984 also presented with similar problems. The researchers followed up 20 children out of an original group of 47, who had been studied 10 years earlier. The mean age of this group was 14.10, very similar to the Paul and Cohen (1984) study. When these children were first seen they were all diagnosed as 'language disordered'. The group had passed a screening hearing test and anyone with a neurological or craniofacial abnormality was excluded from the initial study. Aram et al.(1984) followed up the children's academic performance, their speech and language and social adjustment.

This group of 20 teenagers had 60% of their verbal IQs, 80% of the Performance IQs and 70% of the Full Scale IQs within

or above the low average range. Yet they continued to have language difficulties and had required more special educational attention than their peer group. When Howlin and Rutter (1987) re-analysed the data from 11 children, who had an initial IQ of at least 90, they confirmed that there was an increased rate of educational difficulties.

In a study of 156 children with speech and language problems, who entered Dawn House School in Nottinghamshire between 1974 and 1987, Haynes (1992) reports that almost all had persisting language problems which affected their educational achievement, work prospects and social life. These children had such severe speech and language problems that they had been placed at this special boarding/day language school. Their nonverbal skills were average or above and they did not have additional significant problems. Yet their difficulties were so severe and pervasive that many aspects of their life were affected.

The following study is a report of one of the few prospective studies which have been carried out in the United Kingdom. Bishop and Edmundson (1987) tried to predict which children with language delay in the pre-school years would continue to have language difficulties on school entry. They saw 87 language disordered children from the North of England. The children were seen at 4 years of age and again at 4.6 and 5.6 years.

The Leiter Scales were used to identify a group that were generally delayed from a group that were specifically language impaired (SLI). Using a battery of tests, the authors were able to accurately predict the outcome of language problems for 90% of 4 years olds assessed.

The authors found that the best single predictive language test as to whether a child's language problems will improve, was the 'Bus Story' (Renfrew 1969). In this test, a child listens to a story, told by the tester and looks at the accompanying pictures. Then the child retells the story while looking at the pictures. The test is scored on the basis of recall of content, sequencing ability and grammatical structures.

Bishop and Edmundson (1987) found that the severity of a phonological problem was not in itself a good prognostic sign. This finding indicates that adults seeing a child with a communication problem need to be aware of the child's semantics, syntax and pragmatics. A delayed or disordered sound system, which are often noticed first, is not necessarily an accurate predictor of later problems. In fact the more pervasive a communication problem is the more problems a child is likely to have. Bishop and Edmundson (1987) found that children with language problems at 5.6 years had difficulty with reading comprehension, spoken language skills and some non-verbal tasks. These results

indicate the way in which a persistent language delay can influence academic achievement.

The evidence from these studies does appear to support the view that children with language difficulties are at risk of failing in school. Cazden (1973) wrote that language is the curricular content and the principle medium for learning and teaching. So, a child who has poorly developed linguistic skills on school entry will have difficulty understanding classroom instructions, explanations and curriculum content.

Most of the studies reviewed above indicate that there is a link between language impairment and educational problems but it is not conclusive. One of the reasons that the evidence is not conclusive is because of the way certain aspects of a child's personality, learning style or the school environment will compensate for some of their problems. However, therapists and teachers who can work effectively together can provide children who have communication problems with considerable support during their time in school.

SUMMARY

In this chapter four models have been presented which have been developed to try to explain communication problems.

These models have informed the professional practice of both therapists and teachers. Any or all of them could be utilised by either of the professionals in the study when dealing with children who have communication difficulties. It may be that therapists and teachers who work closely together may develop similar approaches to the children, regarding assessment and intervention. This would be less likely to happen when the therapist is based in a health centre or hospital, as there would be less contact with the teacher.

A clinic-based therapist may rely more on the medical and linguistic model. A school based therapist is likely to be more aware of cognitive elements such as attention and memory which will influence a child's linguistic and educational development and will therefore tend towards the psycholinguistic model. Within the school environment a psycholinguistic model may be used by both teachers and therapists. Thus it can be seen that the work base of a therapist may influence the selection of a particular theoretical model.

The therapist's work base may also influence their awareness of the risk of educational failure following a communication problem. In theory, all therapists will be aware of potential problems, but therapists in a school setting are more likely to see children with such learning

problems on a regular basis. A therapist in a clinic, with pressure to reduce the waiting list, is likely to discharge from therapy a child who copes in the one-to-one setting of the clinic without contacting the child's teacher to see how s/he is coping in the classroom.

It is not always clear why some children who had speech and language problems when they were young have further academic difficulties and others do not. It may depend on the school environment and teaching methods, so that for some children compensatory interaction occurs. The child's abilities and the setting in which they play and learn needs to be constantly evaluated to see how a child can best be helped. It may require a whole school policy ensuring a clear commitment to children with linguistic difficulties. In this way the staff can offer a consistent approach to the children. Such a policy also provides support for individual class teachers who are responsible for supporting the child as they progress through the curriculum (Goacher, Evans, Welton and Wedell 1988).

The child's own attitude to their communication problem also has an influence on their future development. Haynes & Naidoo (1991) found that in their follow-up study the young adults they contacted who had left Dawn House school and appeared to have developed a social life, were the children

who at school had always been willing to communicate regardless of the severity of their language problem.

All the retrospective studies reviewed earlier looked at the relationship between communication disabilities and educational achievement. Educational achievement in school is based on or bound up with language development either oral or written and not just when highlighted as speaking and listening within the National Curriculum (NC) core subject of English.

When a child enters school the class/nursery teacher may be the first professional from education to work with the child. The speech and language therapist may be called in later as a specialist in the area of communication disability. Both these professionals bring their knowledge and skills to their work with a child who has communication problems. If they can work successfully together the child will receive a consistent and co-ordinated intervention approach.

However, as stated at the beginning of this chapter, the current climate in both health and education is one of change which may be affecting the consistency of this approach. More speech and language therapists have been working in mainstream schools as a result of the 1981 Act where they have struggled, alongside teachers, to learn to

learn about the National Curriculum. In turn, teachers are bewildered by the pressure that the health service puts on therapists to see as many children as possible within a given time period. The increasing pressure to market one's own profession, to compete with the other schools or clinics and to increase productivity has put new demands on both professionals. It has not been an easy time in which to develop collaborative working practices. However, some professionals have managed to do this, in spite of the difficulties with in their own profession.

This research is concerned with exploring the ways in which therapists and teachers have managed to work together despite all these external pressures.

Chapter three contains a review of the literature relating to collaboration and partnerships between speech and language therapists and teachers. As these two professional groups are trained in different ways and deliver their services in varied ways, the training and organisational systems of teachers and therapists will be described in the next chapter.

CHAPTER 2

SERVICES FOR CHILDREN WITH COMMUNICATION PROBLEMS

**'Effective multi-professional work requires cooperation, collaboration and mutual support on the part of the contributors'.
(Paragraph 51: Circular 22/89)**

A multi-professional team for children with language difficulties will involve amongst others, teachers and speech and language therapists. These two professions are employed by two different agencies. Teachers are employed by the Education Authority and speech and language therapists by the Health Authority. In the following chapter the qualifications and training of both of these professions will be described, as well as their delivery of services for children with communication problems. The chapter will begin with a description of speech and language therapists. Within this section a brief history of the profession will be provided to enable the reader to understand the current context within which the profession operates.

2.1 SPEECH AND LANGUAGE THERAPISTS

Speech and Language Therapists provide assessment, intervention and information on both developmental and acquired disorders of communication.

2.1.1 HISTORY OF THE PROFESSION

The professional body, the College of Speech Therapists was formed in 1945. It was an amalgamation of the British Society of Speech Therapists, a medically orientated group who had the backing of the Medical Advisory Council and the Association of Speech Therapists, whose background was in speech training and elocution. In 1991 there was a change in the name of the College and it became the College of Speech and Language Therapists.

In 1969 the Committee of Enquiry into Speech Therapy Services, chaired by Professor Randolph Quirk was set up by the Department of Education and Science (DES) and the Department of Health and Social Services (DHSS). Its terms of reference were as follows :-

'To consider the need for and the role of speech therapy in the field of education and of medicine, the assessment and treatment of those suffering from speech and language disorders and the training appropriate for those specially concerned in this work and to make recommendations'.
(Page iv.)

In 1972, when the Committee's Report, 'the Quirk Report' was published there were two speech therapy services in Great Britain. The Education Speech Therapy service was organised, under Section 48 of the Education Act 1944, as part of the School Health Service and a Hospital based service was part

of the National Health Service. There were about three times as many speech therapists employed in the School Health Service as in the hospital service.

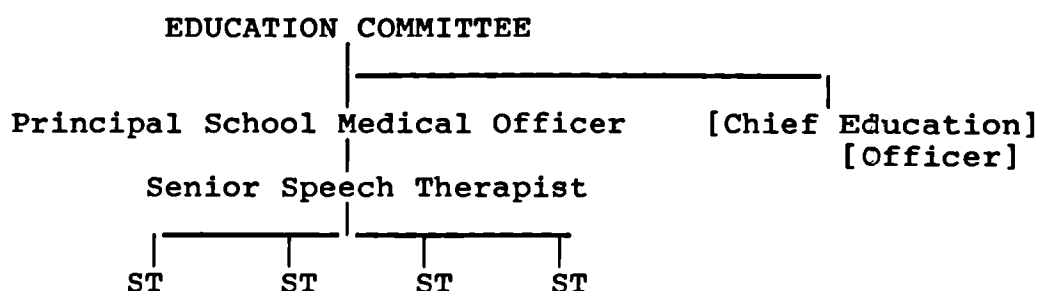


Figure 6. The organisation of Speech Therapy Services in the School Health Service in 1972

The diagram above illustrates the significant roles of both the Principal School Medical Officer and the Chief Education Officer. They established the level of speech therapy provision required in an area and were responsible for taking these recommendations to the Education Committee. A Senior Speech Therapist was responsible for the deployment of the therapists and supervised their work. Children seen by therapists from the School Health Service attended ordinary schools or special schools.

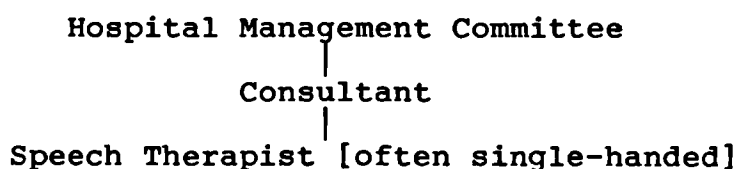


Figure 7. The organisation of Speech Therapy Services in the Hospital Service in 1972

Speech therapists working in hospitals received referrals from a range of hospital departments and their colleagues in the Education Speech Therapy Service. Hospital based therapists had little contact with teachers in comparison to their colleagues employed by the Education Service.

The hospital based therapists tended to work, often single-handed, under the aegis of one department, responsible to a consultant. They were dependent on that consultant representing them on the Hospital Management Committee.

It can be seen that the profession had a 'Dual Allegiance' as the Quirk Report highlighted (Section 4.31) to both education and medicine. Therapists themselves indicated an allegiance to the professional group that they came into contact with most. This is also reflected in the theoretical models, described in the previous chapter which influence the assessment and intervention procedures used by individual therapists. Children with communication problems need a professional therapist who has access to knowledge from both the fields of education and medicine.

In 1974 the National Health Service (NHS) re-organisation unified the speech therapy service under an Area Speech Therapist. This manager was responsible for developing a cohesive policy for provision across the Area Health Authority. One significant problem that this reorganisation

highlighted was the lack of co-terminosity of Education Authority and Area Health Authority boundaries. Thus the same health authority service was trying to meet the needs of two or even three different education authorities.

By 1982 a further re-organisation of the NHS led to smaller units of responsibility - District Health Authorities. This meant that the Area Speech Therapist was replaced by one or more District Speech Therapy Managers (DSTM). A few DSTMs fought to maintain a unified service across several district boundaries. Those that were successful were able to manage their service at a supra-district level.

2.1.2 QUALIFICATIONS

There are currently two routes to qualification as a speech and language therapist. One route is at undergraduate level, via a three or four year degree course. The other route is at a postgraduate level and usually takes 2 years of full time study. At the end of these courses the successful students are awarded an academic and vocational qualification. They are qualified to work with both adults and children who have communication problems. Following their graduation, therapists in the U.K. are urged to join the College of Speech and Language Therapists but they are not legally required to do so.

2.1.3 TRAINING

The Quirk Report (1972) recommended that the training of speech therapists should no longer occur at a diploma level but that it should become an all graduate entry profession. All the courses are subject to a regular accrediting procedure by the professional body (CSLT). This is in addition to the course validation procedures carried out by individual universities.

Students cover such topics as child development, psychology, anatomy and physiology, audiology, neurology, phonetics and linguistics and speech pathology. They also have practical placements which are carried out alongside lectures and tutorials.

In-service training following qualification may be offered within a district or a region. Therapists may use this type of training to become more skilled in their work with a particular client group. The College of Speech and Language Therapists recently published 'Quality Assurance. Professional Standards for Speech and Language Therapists' (1991) in which 3 levels of professionally qualified therapists are described :

1. **Specialist Speech and Language Therapist.** These therapists have additional qualifications, well developed

skills and an in-depth knowledge about a particular client group and/or a disorder. Such a therapist will act as advisor within the profession and to other related professional groups.

2. Generalist Speech and Language Therapist. They see a mixed population of clients and will have good assessment, diagnostic and intervention skills but will not have acquired specialist knowledge of any particular group or disorder.

3. Specialised Speech and Language Therapist. In this context specialisation refers to a service provided to a single designated location, client group or those with a specific disorder. These therapists do not have the additional training or knowledge that a specialist therapist has but they may work towards this in their professional development.

There are also 2 levels of unqualified support to the therapist. The Speech and Language Therapy Assistant and as well as volunteers.

Speech and language therapy managers are always concerned about having an appropriate number of all types of therapists in order to achieve appropriate staffing levels. If they are not able to recruit and retain enough staff they

will not be able to deliver an agreed and satisfactory service.

2.1.4 NUMBERS OF THERAPISTS

The development of services for the school population had traditionally been based on a notion of 1 speech and language therapist to 10,000 children. The Quirk report suggested a ratio of 6 whole time equivalent therapists per 100,000 population ; 1 therapist per 5,000 children.

Unfortunately those contributing to the Quirk report had not foreseen the population growth, the extended life span of the individual and the specialist development of speech and language therapy provision. Therapists developed skills which enabled them to work with psychiatric patients, adults with learning difficulties, young babies with feeding problems and pre-school children as well as adults with degenerative diseases and the ever increasing geriatric population. All of these aspects created a demand for more therapists. If new posts could not be created and filled, then those already in post were expected to see clients with a wider range of problems.

In 1985 VOCAL (Voluntary Organisations Communication and Language), an organisation that drew together a wide range of charities who were concerned about people who have

communication disorders, carried out a survey of speech therapy provision for children, with particular reference to special education.

They sent questionnaires to all Speech Therapy Managers (DSTM) in England and Wales seeking information about staff deployment, staff to child ratio and the extent of services to special education. A second phase of the survey gathered details about referral sources, disorders treated and service delivery from therapists in 3 health authorities. The return rate from the DSTMs was 61% in England and 40% in Wales.

The report looked at staff:child ratios as the Quirk report had recommended a a ratio of 1:5000 children. VOCAL discovered the following ratios :

21 DHAs	<<	1: 5000
21 DHAs		1: 5001 - 5999
42 DHAs	>>	1: 6000

Of those District Health Authorities (DHA)s included in the analysis 75% had staff : child population ratios worse than those recommended by the Quirk report in 1972. The report also noted that therapists worked with caseloads ranging from 54 - 387. In the Quirk report an average case load was assumed to be 100 patients, which the College of Speech and Language Therapists supports.

The therapist : pupil ratio had been calculated for units/schools where the DSTM had given the school population

Special Education Category	Therapist : Pupil
Language Disorder	1 : 23
Deaf /partially hearing	1 : 63
Autistic	1 : 79
Physically handicapped	1 : 161
Severe learning problems	1 : 248
Moderate learning problems	1 : 460

The report's final conclusion highlighted the falling proportion of speech and language therapy staff working with children. This lead to long waiting lists and despite a consistent input into special schools, a shortfall between existing input and potential need.

The size of caseloads reported in the VOCAL survey varied depending on the geographical location of the therapist. However one cannot ignore the fact that the information was collected by the DSTMs and their therapists may have presented information in a way that they know is acceptable to their manager. If the data had been sent anonymously to the researcher the results may have been different. It may even have indicated larger caseloads in some areas. Data were collected via closed questions which gave useful quantitative data. There was no opportunity for the reader to gain any insight into the therapist's own views about service provision.

The questionnaire used to collect the data for this report by VOCAL, was designed by a senior speech therapist in 1985. This was four years after the 1981 Education Act was passed and two years after it came into operation. It was therefore disappointing to see both a questionnaire and a report on services to children with special needs, using classification labels that were at odds with those being used in education circles at that time.

It is also worth pointing out that the focus was on speech and language therapy provision in clearly categorised special education settings. There was no attempt to look at speech and language therapy support for statemented children in mainstream schools.

In 1989, Enderby and Davis in an article about service delivery recommended 26 whole time equivalent therapists per 100,000 population. While a Manpower Planning Advisory group (1990) report stated that across the U.K. establishments were 5.9 whole time equivalents per 100,000 population.

W.T.E THERAPIST	POPULATION	REFERENCE	DATE
6.0	100,000	Quirk	1972
26.0	100,000	Enderby/Davis	1989

Figure 8. Number of whole time equivalent therapists recommended per 100,000 population

These figures show the difficulty that some communication impaired children may have in trying to gain help from a language expert. The scarcity of speech and language therapists means that each therapist will be liaising with a large number of teachers. Such a shortage of therapists would indicate that a different type of service delivery is required for children with communication problems. Perhaps collaboration between teachers and therapists is the only viable solution to help these children.

2.1.5 SERVICE DELIVERY

The present speech and language therapy service for children with communication problems is frequently organised in the following way. Newly qualified therapists will be appointed to a first post with a 'mixed caseload'. This provides experience with clients of all ages. The therapist may work in a hospital, a school and a community health centre all during the same week. As therapists gain more experience they begin to specialise with specific communication problems and / or client groups of certain ages. This type of specialisation is also linked very closely to promotion and career development.

The type of intervention offered by a speech and language therapist will vary depending on the theoretical model used by the professional and on the way local services are

organised. Roulstone (1987) outlined 4 main types of intervention :-

1. Individual
2. Group
3. Programmes
4. Advisory

Types 1 and 2 may take place intensively, weekly and usually involve parents. In type 3, another professional will usually carry out the programme.

Whatever theoretical model a speech and language therapist uses when working with a child who has a communication problem the type and amount of speech and language therapy offered will depend on geographical location. Local arrangements for service provision have until recently been the responsibility of the District Speech and Language Therapy Manager (DSTM). The Manager is responsible for the appointment of speech therapy staff and the planning of service delivery to both education and health service establishments. There is no evidence that the NHS and Community Care Act 1990 has ensured greater continuity in service provision across the country. Speech and language therapy managers have become service providers in the reorganised NHS. This has meant that they have had to cost and market their services to purchasing authorities, District Health Authorities (DHAs) and budget-holding general practitioner.

In 1989 Enderby and Davies published the results of a study funded by the Department of Health. The results of this study "Planning a Service to meet the Needs", are still being considered by the Department with a view to formulating future policies for the delivery of speech and language therapy services.

The study is based on data collected within the Frenchay Health District 1987-1988 from the Health Service Time Management System (HSTM). Each patient within the district has their details registered on the HSTM computer file. Speech and language therapists recorded clinical input and professional duties, so that an analysis of their workload and contacts with clients could be made. Where data was not precise or detailed enough, on certain client groups, information was sought from therapists in other health authorities to produce a 'consensus treatment regimen'.

The paper raises several concerns about the future organisation of service delivery if the results from the Enderby and Davies (1989) are used to plan services for children with communication problems. The authors quote the figure of 3.5 hours for the time a speech and language therapist spends assessing a child. This also includes time spent talking to parents and planning therapy. At no point in the article do the authors refer to school visits or time allocated to talk to teachers. They state that the

average amount of therapy for a child is one 45 minute session for 16 weeks.

The research does not refer to language units or statemented children in schools who require language support. The authors do not include children without statements, who have communication problems and require long term support.

Children with moderate and severe learning difficulties are discussed in a separate section in the article, but again there is little mention of speech therapists being involved in schools.

Enderby and Davies (1989) only included children between 3 - 9 years when evaluating the time spent providing therapy for children. This could lead to an underestimate about the numbers of children requiring speech therapy. As this paper is being used by the Department of Health for planning future services, this is a serious omission.

The patterns of referral to speech and language therapy are considered in the following section.

2.1.6 REFERRALS TO SPEECH AND LANGUAGE THERAPY

Edwards, Cape, Foreman and Brown (1985) studied 4 Area Health Authorities and looked at referral information on 216

children aged between 3-6 years. They found that the referrals came from the health visitor, parent, medical officer, school or speech and language therapists. Family doctors referred a very small number of children. This study also revealed that children under 4 years of age were referred more often than those over this age. There was also a preponderance of children referred with articulation problems.

Roulstone (1987) carried out a survey in the Bristol and Weston Health Authority in 1984/85 which examined the referral of children from local primary schools. Following a series of meetings with headteachers, schools were informed which children were already in therapy, which ones were on review or awaiting therapy. Schools were then asked to list any other children that they would like seen by the speech and language therapist. A total of 1,235 children were assessed, with the highest referral rates coming from Infant schools followed by Nursery and Junior schools. When compared to the child population in the area, the referral rate to speech and language therapy was 6%.

SUMMARY

Speech and language therapy is now an all graduate entry profession, with the majority of therapists employed in the NHS. A child is usually referred to a speech and language

therapist when there is concern about a child's communication skills. Children can be referred by their parents or professionals who are concerned about them.

Children who require therapy may be seen by a generalist therapist or one who has specialised either with a particular client group, such as children under 5 years of age or with a specific communication problem, such as stammering or semantic-pragmatic problems. The intervention may be on an individual basis, in small groups or a combination of both approaches. Therapy may take place in the child's home, in school or in a Health Centre.

The pattern of service delivery will vary from geographical area to geographical area and will be shaped by the local speech and language therapy manager.

In the following section the qualifications and training of teachers who work with children with speech and language problems will be described. This will be followed by a consideration of the way in which teachers work with children who have communication problems.

2.2 TEACHERS

'A teacher is faced with the task of educating a heterogeneous group of children whose strengths and weaknesses are as diverse as their individual personalities'.
(Johnston 1990)

The quote from Johnston indicates something of the challenge experienced by teachers on a daily basis. As soon as any child in a group is identified as having special educational needs, the teacher faces an additional challenge. This may include the arrival of peripatetic professionals in the classroom, who will provide the teacher with a programme for a specific child and depart until the following week, term or year.

A child who enters school, at 5 years of age, with a previously unrecognised communication difficulty provides the class teacher with a problem. If the child is quiet and well behaved, the teacher may be unaware that the child has any difficulty in communicating. If, on the other hand, this child is noisy, disruptive and disturbs the other children, the behavioural signs may alert the teacher to a language learning difficulty.

2.2.1 QUALIFICATIONS

A Bachelor of Education course or a one year Post-Graduate Certificate of Education (PGCE) are still the most common entry routes into the teaching profession.

In 1972 the government White paper 'Education : a Framework for Expansion', put forward the policy that there should be an all graduate entry into the teaching profession. This was

the same year in which the Quirk report was making an identical recommendation for the speech therapy profession.

2.2.2 TRAINING

During their training courses teachers are required to cover a wide range of subjects, such as child development, educational psychology, teaching methods, classroom organisation as well as periods of teaching practice in a school. For those students on PGCE courses it is assumed that they have acquired competence in a specific subject during their undergraduate course.

When the time allocation for studying 'language' is considered on a teacher training course it can appear generous. However the heading 'language' includes both spoken and written language, the later area covers reading, spelling and creative writing. As Edwards and Westgate (1987) write

'Although talk has long been the principal medium of instruction in the schools, the aim of fostering pupils' powers of verbal expression and the valuing of their talk for its contribution to learning have emerged much more slowly. Traditional education put its stress on written language; it is the skills of literacy, not oracy, which figure among the '3Rs'.'

(1987, p. 9)

Therefore the amount of time which has been and can be

spent on communication problems and the implications for curriculum design and teaching methodology is severely limited. For the majority of teachers children arrive at school able to communicate, so the teacher's job is to facilitate and develop that skill within the classroom.

Most teachers who complete an initial teacher training qualification will work with children in mainstream schools. Some teachers choose to specialise from the outset while others only develop this interest later on in their career.

2.2.3 SPECIALIST TRAINING

Johnston (1990) stated that any class of children are a heterogeneous group. A skilled professional should be able to teach a mixed ability group. Within a class there will be children who have, at some time in their school lives, special educational needs. In the Warnock Report (1978) the importance of all teachers being informed about special needs, was stressed. The report recommended that an awareness of special educational needs should be developed during teacher training courses

'A special educational element should be included in all courses of initial teacher training, including those leading to a post graduate certificate in education. It should be taught within the general context of child development'.

(Paragraph 12.7 Warnock 1978)

The report was also realistic as an awareness of the time pressures and reality of teacher education was shown by the statement in paragraph 12.8

'It will not be appropriate, nor will there be time, for students to study specific disabilities in any depth within this element of the teacher training course'.

(Paragraph 12.8 Warnock 1978)

This means that the teachers' level of knowledge and ability to identify a child with learning difficulties will depend on their initial training and subsequent in-service training. It is unlikely that teachers will have a great deal of knowledge about communication problems (Lesser & Hassip 1986), although they may become more aware of those children who are having difficulties as they measure the performance of their pupils against the Listening and Speaking Attainment Targets in English (ERA 1988).

A mainstream class teacher, who faces the challenge of teaching a child with special needs, may receive help from a support teacher. The support teacher may be attached to or based in the school. Larcombe (1987) wrote that the type of help the class teacher receives will depend on the needs of the individual child and the way the two teachers decide to work together. The support teacher may support a specific pupil in the classroom or they may help with lesson planning, thus ensuring the child can remain in the

ordinary classroom. Another possibility is that the support teacher may prepare the pupil in advance for the main class activity. Children with learning difficulties, Evans (1987) stated, require help to organise themselves so that they can learn. Hodgson, Clunies-Ross and Hegarty (1984) reported that an additional strategy of post-lesson teaching was helpful to some students.

The support teacher in the United States of America has been described by Heufner (1988) as 'A Consulting Teacher'. The aim of the support teachers has been to 'reduce the need for pullout special education services'. The model has similarities with those proposed by Larcombe (1987) and Hodgson et al. (1984). As in the above models, Heufner (1988) states that the consultant teacher model -

'derives benefit from its collaborative dimension, with regular and special education teachers planning together and sharing responsibility for instructional outcomes'.

2.2.4 CHILDREN WITH COMMUNICATION PROBLEMS AND TEACHER TRAINING

Robson, Sebba, Mittler and Davies (1988) identified 4 different levels in the training of a professional, where information about special needs may be provided. These were at : -

- initial teacher training
- training for all serving teachers
- courses for 'designated' teachers
- courses for specialist teachers.

Information about children with communication problems is rarely presented at any of these stages. There are very few courses, either LEA organised or award bearing, which train teachers specifically to work with communication impaired children.

Communication impairment is not a National Priority area. This has meant that teachers applying for courses on communication problems are rarely seconded or funded from central government money.

Teachers who work with children who have communication problems have to acquire specialist knowledge either from short courses or by working alongside speech therapists or private study. There are a small number of award bearing courses, which are outlined below.

In September 1987 Newcastle University launched a 2 year part-time course for teachers on Child Language and Language Disability. On completion of the course students are awarded a Diploma in Advanced Education Studies. They can also continue on to acquire a B. Phil and M.Ed. The course is taught jointly by the School of Education and the Department of Speech. This was an encouraging venture as the Post Graduate Diploma in Remedial Language Studies at Reading University had closed the previous year due to the limited

number of students who could get full-time secondment and funding.

These courses all required some element of full-time secondment and this was difficult for LEAs to arrange. The DES funded a full-time post for 2 years at the School of Education, Birmingham University where a needs analysis was carried out into the viability of running a distance taught course for teachers of children with communication problems. A Research Fellow was initially appointed to carry out this analysis and identify from potential candidates what course content they wanted. Additional funding has come from the charity AFASIC to support the publication of teaching material (Miller 1991).

The Distance-Learning Course for Teachers of Children with Speech and Language Disorders began at Birmingham University in April 1990. The course lasts for 2 years with a summer school as an integral part of the course.

In 1992 the Postgraduate Diploma in the Education of Children with Speech and Language Impairment was established at Kingston University. This is an interesting development because it is taught in collaboration with Whitefield School and Centre, Walthamstow.

For members of both the speech and language therapy and teaching profession who want to keep up to date without course attendance, the National Association of Professionals working with Language Impaired Children (NAPLIC) offers an opportunity for interested teachers and other professionals to meet together at local lectures and share information on topics of common interest. There is a newsletter and a journal which is published for those :-

'who teach children handicapped by an inadequate command of spoken or written language, for any reason, of any age, in any setting'.

The journal, Child Language Teaching and Therapy, is edited by David Crystal. Through this journal he tries to encourage professionals to share their expertise and practical knowledge to help children with a communication problem.

2.2.5 SERVICE DELIVERY

Children with communication problems may receive support in any of five settings :

- mainstream school
- a unit, based in a mainstream school
- special school in the maintained sector
- independent school catering specifically for speech and language disorders
- non-maintained special school

(Cranmer 1992)

In a mainstream setting the class teacher is unlikely to have any specialist training about speech and language problems. They may be able to draw on a range of colleagues for support. This may be the special needs teacher in the school or the Special Needs Adviser. Although Goacher, Evans, Welton and Wedell (1988) report very variable arrangements in the United Kingdom, one in ten LEAs did not have such a post as Special Needs Adviser. In other authorities a Special Needs Adviser also covered other curriculum areas or a team of advisors may have been created.

In some areas the 'consultant' role has been adopted. The City of Birmingham, Byers Brown and Edwards (1989) report, appointed a teacher in 1985 to be responsible for setting up a system for helping children with speech and language problems. This person became responsible for a considerable amount of in-service training for staff in mainstream school as well as language units.

In a unit or special school the child's teacher may have qualifications in special needs work but not specifically in language. An increasing number of teachers through courses such as the Birmingham distance taught course will, in the future, have a specialist qualification to work with children who have communication problems. Although they will

have acquired this through private study in their own free time.

SUMMARY

The focus on language in teacher training is on developing a child's potential literacy and more recently their oracy skills. The teacher is expected to be able to do this with a mixed ability class. The teacher is also responsible for all other aspects of the curriculum.

Teachers who work within the special needs area will be more aware of children with communication problems but may not have received very much training in this area. Although there are now a small number of courses to help teachers become more effective in working with children who have communication problems.

A SUMMARY OF THE SECTIONS ON SPEECH AND LANGUAGE THERAPISTS AND TEACHERS

Children with communication problems may require the support and services of several professional groups. Both speech and language therapists and teachers come into contact with these children. As can be seen in this chapter, these two groups enter their chosen profession by an initial training which has a few elements in common such as

child development, psychology and assessed practical work with children.

The therapists are provided with considerable specialist linguistic and medical information. They are expected to work individually or with small groups of children who are known to have communication difficulties.

Primary school teachers need information about all areas of the curriculum including science and P.E. They are assessed controlling and teaching a large group of children, many of whom will have extremely good communication skills. Specialist teachers may be aware of children who have speech and language problems, having acquired more specific knowledge through their work. Although these teachers will still be working with children in larger groups than the therapist.

The opportunities for additional in-service training are very different for example, teachers always need cover for their class during school hours. The organisations in which they work are influenced by different legislation and function in different ways.

In this chapter the training of therapists and teachers has been described and compared as well as the ways in which they work with children who have communication problems. In

the next chapter there will be a review of current patterns of collaboration between these two professionals, teachers' views of speech and language therapists and theories which influence interpersonal collaboration.

CHAPTER 3

PROFESSIONALISM AND COLLABORATION

Collaboration between people, who are members of different professional groups, is not easy. In America Johnson, Pugach & Devlin (1990) urge collaboration between general and special educators, as the diversity of students in the classrooms increase. These authors believe that both types of educators have to recognize the limits of their training and their own professional biases in order to collaborate effectively. The focus in this chapter will be professionalism, collaboration and theories which may explain why people work together. Also teachers' views of speech and language therapists as well as evidence of therapists and teachers collaborating, will be discussed.

3.1 PROFESSIONALISM

It could be said that all professionals are individuals and that they are trained and many work as individuals. However working alone can be isolating and might inhibit professional growth. So professionals have always come together in mutually beneficial groups to offer their services more effectively. This is true of both teachers and speech and language therapists. Both professions require members to go through a specific training process and then

individuals are licensed to practise. Schools are clearly recognised institutions with a formal organisation and specific roles. Certain roles may be associated with power and authority although professionals by definition expect to be autonomous. In an effort to maintain this autonomy individuals have to establish their own psychological or physical territory in which to work. Norwich (1985) stated that a class teacher has little control over time allocation and the school schedule and so little professional autonomy. In fact the classroom is the only physical area that an individual teacher can control. This can mean that any other person coming into that area could be seen as a potential threat.

Barnett (1987) interviewed 43 people involved in teacher education either as tutors or practitioners. He asked them for their views on the professional preparation of teachers. At the end of his study he concluded that there was 'no consensus over the role of the school teacher'. This outcome is open to interpretation. A negative viewpoint would be that the trainee teacher has no clear role to adopt. However this can be an advantage in that it allows the professional considerable freedom in the way they carry out their job.

The people Barnett (1987) interviewed also believed that the status of the teaching profession was low amongst other

professions and the government. This view was supported by John Fish in 1988, when he addressed a multi-professional audience at a course organised by VOCAL. He stated that education as a profession had been constantly downgraded by governments over the years, whereas health services had not. A primary school class teacher, according to Barnett (1987), is expected to be able to teach a wide range of subjects as well as facilitating each pupil's development. The introduction of the National Curriculum (ERA 1988) has meant that there is greater uniformity of curriculum content from school to school. Although individual teachers have less autonomy and in the Interim Report on the National Curriculum and its Assessment (1993) Ron Dearing acknowledged that

'little or no weighting is currently given
to teacher assessment in the tested
attainment targets'. (p.52)

Dearing believes that this implies a lack of trust in the professional abilities of teachers. He stated that 'teachers want to be trusted' when they are working within the National Curriculum framework. They are directly responsible to the headteacher and in their daily timetable there is a minimal amount of flexibility. The average class teacher in a mainstream primary school is in contact with the class for the majority of the school day.

Frequently the Speech and Language Therapy Manager is not

on the same site as other speech and language therapists, whereas a headteacher has the same base as class teachers. In addition the Speech and Language Therapy Manager may be a specialist in E.N.T. work, yet manage therapists who work with children who have severe learning difficulties, physical problems or emotional difficulties.

This type of management structure, where there are specialist services with an overall manager has more similarities with a secondary school than a primary school. Whereas the peripatetic speech and language therapist, visiting several different venues in one week, has more in common with the peripatetic support teachers. In these circumstances the partnership between professionals is often consultative rather than collaborative. These two terms can convey totally different systems and approaches which are investigated in the next section.

3.2 CONSULTATION

When writing about mental health services in America Caplan (1976) refers to the use of a consultation model which has three elements - consultant, consultee and client. This is used when one professional seeks specific, possibly expert, information from another professional in order to help a client. Consultation has been defined as a

'voluntary, non supervisory relationship between professionals from differing fields established to aid one in his/her professional functioning'.

Caplan (1970)

Figg and Stoker (1989) two educational psychologists draw on Caplan's model when describing their own relationship with a teacher and a child. The consultee is usually responsible for any action which needs to be taken after the consultation and will hopefully draw less and less on the consultant as they become more expert. Figg and Stoker suggest that this produces many professional problems for educational psychologists. Among these is the issue of whether a professional feels that they are 'giving away' some of their expertise if they work in this way. If consultation is viewed in this way it implies that the professional has a finite set of skills and knowledge which diminishes each time it is shared with another person.

A positive view is expressed by Conoley and Conoley (1992) who hope that the consultee will generalise their newly acquired skills and knowledge to their work with other clients. They see this sort of generalisation as an indication that the consultation has been successful.

3.3 COLLABORATION

The definition of collaboration bears some similarities with consultation, writers such as Johnson, Pugach & Devlin (1990) believe that this is because collaboration has its roots in consultation.

'Collaboration is the joining together of 2 or more individuals in an egalitarian relationship to achieve a mutually determined goal'.

Conoley & Conoley (1981)

'The egalitarian nature is the most distinguishing characteristic of collaborative strategy.'

Caplan (1976)

In a child development centre in London, paediatricians and psychiatrists have been developing collaborative working practices (Turk, Daoud, Hyde, Saedi and Jones 1991). The professionals had been working alongside each other, seeing children on an individual basis, making recommendations about whether a child should be referred to the psychiatric team and vice versa. The need to change their professional practice was driven by the professionals as well as concern from the local community about a fragmented service. The psychiatrists and paediatricians decided to adopt two styles of working - consultation and collaboration. The consultation approach was already in use and was seen as a

valuable way of enabling staff to develop skills for further work. The new approach was a collaborative one.

The authors describe the way that members of both teams were involved in developmental clinics and saw the family together. The authors describe the benefits of inter-professional education as mutual, using terms such as 'we can learn from each other' and 'we can learn together'. In this account of a change in working practices, it is interesting that the two case studies cited involve children who had delayed or persistent speech difficulties.

When writing about educational collaboration Idol and West (1991) state that collaboration is an 'adult to adult interactive process'. Any changes in pupils will come after the benefits of increased skills, knowledge and behaviours which the collaborating adults gain. The American Speech-Language-Hearing Association (1991) proposed a collaborative service model for students with Language Learning Disorders in Public schools. They believed that in a collaborative model

'no one professional has an adequate knowledge base or expertise to execute all the functions associated with providing educational services for students'.
(ASHA 1991)

The differences between consultation and collaboration appear to arise over the 'egalitarian' aspects of a

partnership. Equality in a collaborative relationship can be difficult to achieve if one member of the collaborating pair has asked for the other person's 'expert' opinion. Collaborative work practices are based on inter-personal interactions.

Such interactions had been a focus of research in social psychology since the 1950s. There are two theories which were considered useful when trying to understand interpersonal exchanges. One was Social Exchange Theory which was written about by George Homans in 1958 and Peter Blau in 1964 and 1986. The second was Contact Hypothesis which was first proposed by Gordon Allport in 1954. These two approaches, although originating some time ago, still appear to have relevance to this research.

3.4 SOCIAL EXCHANGE THEORY

Social Exchange or Exchange Theory was developed and presented by George Homans in 1958, when he published his first paper on Exchange Theory. This approach is based on observation in which the researcher is seen as an interpreter of patterns of behaviour and as such could be described as positivistic. In 1964 Peter Blau's book 'Exchange and Power in Social Life' was first published. When it was republished in 1986 there was a new introduction by the author in which he explained how his

thinking about Social Exchange had developed since the first edition had been printed. Blau (1964, 1986) is concerned with the profit and loss calculation in an exchange.

Supporters of Social Exchange Theory believe that in all encounters the individual person assesses the gains and cost for them of a particular interaction. It is assumed that individuals engage in exchanges or interactions which provide a profit or positive payoff. An exchange was defined by Homans (1961) as

'an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons'.

In their interactions people want to minimise the costs of an interaction and maximise their gain or profits. They want the gains or benefits to be greater than the costs. Although some interactions are carried out for other reasons which Blau (1964) refers to as 'fear of God, or fear of their conscience'. He believed that everyone seeks a basic reward such as approval. So when a reward is defined as 'altruistic' Blau suggested that there is an underlying "egoism" in such an approach.

In 1986 Blau acknowledged, in the new foreword to his book, that he had originally believed that Social Exchange Theory explained microsocial aspects of society and he could

develop a theory from this at a macrosocial level. However, now he believes that macro and micro social levels of society are influenced by different theoretical frameworks. Blau is interested in the reciprocal processes which constitute an exchange. He is not concerned with the motives for their involvement in an exchange.

Interactions between the same two people will only continue if both parties are rewarded by the exchange and they both profit from it. Blau (1964, 1986) sees the basic principles which underlie the concept of social exchange as :

- a person who provides rewarding services to another obligates him.
- to discharge this obligation the second must furnish benefits to the first in turn.
- if both individuals value what they receive from the other, they will continue to supply more of their own services to give an incentives for the other to increase his supply.
- however as increasing amounts of assistance are received the need for them diminishes.

This last principle Homans describes this as 'the profits from exchange decrease with the number of exchanges' (1961).

In an exchange between two individuals the obligations are unspecified but usually the person who has benefited from the exchange is eager to reciprocate to ensure that they will receive services in the future. In analysing the cost of an exchange to each partner, the cost of giving and receiving has to be considered and thought of separately.

Sutton (1979) used Social Exchange Theory to interpret the interaction between a client and a social worker. The social worker may see 'enhancement of one's own self-concept' as a reward from the interaction while the client can get 'useful information'. But the social worker may find that the 'demands for help from others and the anxiety and stress' are the costs in such an interaction. Also the client could feel criticised and so be unwilling to keep future appointments. Sutton was suggesting that social workers had to identify and make explicit to some clients the profits to be obtained from continued contact with them.

At the start of any relationship Secord and Backman (1974) believe that there is a form of 'sampling and estimation' to see whether it will be beneficial to the people involved. Blau (1964) sees an exchange partnership as being based on trust, although he acknowledges that if one person has a

wider choice of potential partners than another, they may be less committed to a particular exchange relationship.

The focus on the interdependence of a relationship rather than on the individuals involved, is the main point O'Brien and Kollock (1991) make when they describe how they use Social Exchange Theory as a framework for teaching sociology. They argue that the theory is helpful in providing a 'rational framework between actors'.

When thinking about professional collaboration the therapists and teachers are the actors. The skills and knowledge of both parties could be seen as the currency of the exchange. The speech and language therapists appear to offer specialist information which is useful to the teacher and the teacher trades knowledge about a child's performance in relation to their peer group. One could speculate that both parties would find this trading of information rewarding to them as individuals as well as enabling them to build up a whole picture of the child and ensure a practical intervention strategy is prepared. It may be that if both teacher and therapist were committed to an exchange the child would have the best intervention possible.

In a school where there are several language impaired children all in different classes, there may well be only one speech and language therapist. The therapist will be

expected to interact with each child's teacher in order to ensure an integrated approach. In this setting the therapist has a choice of partners, whereas each teacher may have only one partner (therapist) to interact with. The speech and language therapist may find certain teaching staff 'easier' to deal with than others. If it is difficult to establish a collaborative partnership with a specific teacher and the process demands considerable effort with no apparent benefits, the speech and language therapist may stop making an effort and the relationship will fail to develop.

Although Social Exchange theory is relevant to the ways in which speech and language therapists and teachers work together it is not the only approach which could be used to try to understand the differences in the patterns of collaboration between these two professionals. Contact Hypothesis also offers a useful way of exploring this aspect of the study.

3.5 CONTACT HYPOTHESIS

Contact Hypothesis was first written about in 1954 by Gordon Allport in his book 'The Nature of Prejudice'. In the book Allport analysed the origins of prejudice and made recommendations about how prejudice could be overcome. Many of his suggestions included recommendations about increased

contact between different groups, these recommendations became known as Contact Hypothesis.

In its simplest form this theory states that contact between members of 2 different groups will produce positive attitudes between them. Contact between people of different backgrounds will enable them to increase their knowledge and understanding of their similarities as well as their differences. It is believed that this process helps to reduce prejudice. Sherif's study in 1966 appeared to support this view. At a summer camp of young boys new groups were formed by separating friends, so they were no longer on the same side or in the same group. In fact they slept in different huts. The sheer contact between boys who had not previously been friends produced some in-group favouritism. The attempt to integrate the boys by mixing up previously formed groups had had some success but conflict still occurred between the boys at whole group events such as a fireworks display and a feast.

The conflict was reduced when a superordinate goal was introduced. The goal was to pull the broken down camp truck with a rope to get it started so everyone could get back to the camp for lunch. This needed all the groups to work together and so for this period of time conflict was reduced. In this experiment a superordinate goal reduced conflict.

Success appears to reduce the negative feelings one group may have for another, so if the first group is successful it will feel more positive to the other group. This was demonstrated in the following experiment. Worchel and Norvell (1980) gave groups a cooperative task to do in a laboratory. The laboratory conditions stayed the same but were presented to the group as being helpful or a hindrance to the success of their task. The groups who were successful in the tasks showed an increased attraction to the outgroup. But the attitude of those who 'failed' at the task varied depending on how they perceived the laboratory conditions. If the conditions were 'ideal' then they were hostile to the winning group but if the conditions in the laboratory were poor then their liking for the winning or outgroup increased. So hostility decreased even with failure, if something else could be blamed for a lack of success.

From the results of his early studies Sherif stated that mere contact was not enough to solve intergroup hostilities. Also hostility is reduced if the groups are of equal status, as one source of conflict is the difference in power or status between groups and thus individuals from these groups. To reduce conflict people need to be in a small group for a prolonged period. They also need to have wide social support. Brown (1988) concluded that generalisation of improved attitudes from interpersonal to intergroup situations remains a problem. Brown & Wade (1987) state that

even if a superordinate goal is provided, group members need to have distinctive tasks within the overall job to ensure harmony.

Contact hypothesis is relevant to this study when considering the patterns of interaction between teachers and speech and language therapists. Therapists based in the same school as the teachers should, according to this hypothesis, have more positive feelings towards their teaching colleagues and hopefully work together with less conflict than their colleagues who are clinic based. When therapists and teachers do work together, the needs of individual children may provide a superordinate goal which will help reduce conflict and facilitate collaboration.

3.6 WORKING WITH OTHER PROFESSIONALS

'Teachers cannot expect to be experts in the field of school psychology, nor can school psychologists expect to be experts in the classroom. To provide the best services to children in need, teachers and psychologists need to work together, sharing their expertise'.

Johnston (1990)

The quote from Johnston, who was writing about the working practices of teachers and educational psychologists, could apply just as easily to the working relationship between teachers and speech and language therapists. The primary class room teacher cannot be expected to be an expert in all

areas of child development. Norwich (1990) states that teachers do not see themselves as specialists in language and communication issues. He feels that speech and language therapists have 'quite distinct skills and knowledge in the language field'. The teacher's role involves mediation between the curriculum and the child :

'[the teacher] ... has to lead a child through the educational curriculum, and must bridge the gap between the child's core language abilities and the demands placed upon those abilities by the curriculum'.

(Crystal 1987)

Meyers, Parsons & Martin (1979) suggested that speech and language therapists should work with teachers for the following reasons. There were large numbers of clients who were not seen or offered help by the present service organisation. This situation could be helped by a move from direct service delivery to indirect service delivery, involving the class teacher. There was a continual demand for more therapists to help the individual child receive appropriate intervention and educational support. The underlying point, when considering the reasons for therapists working indirectly with clients, is that that there will never be enough speech and language therapists to cover all the children who could benefit from working with a therapist.

The author McAfee (1987) saw therapy services in an educational environment as alien. As described in the previous chapter, speech and language therapists have historically been seen as allied with medicine and the health services rather than education. An alternative view that speech and language therapists can be viewed as educationalists and thus work legitimately in schools was supported by Daines (1992). He drew on the Lancashire Judgement (R.V. Lancashire County Council. Ex parte CM 1989) and the comments made by the judges to 'establish the credentials of speech and language therapists as educationalists' (Daines p.15). At the same time in America, Montgomery (1992) while writing about a collaborative model of speech and language services stated that -

'The practice setting for the school-based
speech-language pathologist is the world of
education'.
(P.364)

But the expediency of moving away from constant face-to-face contact is not shared by every therapist. There are speech and language therapists who feel that working in an educational setting means they will not be able to see children on an individual basis. Conoley(1981) reports that some professionals believe that one must be in direct contact with the 'pathology'. Frassinelli, Superior and Myers (1983) put forward the view that some speech and language therapists had an 'ingrained disposition towards

direct therapy'. This may mean that they are unwilling or unable to collaborate with teachers.

Even if therapists want to be involved in collaborative work with teachers it can be difficult for the two adults to work together in the same classroom. The classroom is the teacher's domain, the therapist is a visitor. Mike Sullivan's (1987) experiences illustrate the problems two people from the same profession can have when they try to share a classroom. Sullivan was a head teacher, who spent a year working in other people's classrooms as part of a project on curriculum development. He described the negative views any teacher may feel when another teacher comes into the classroom. This highlights some of the problems a speech and language therapist may encounter when trying to work in the classroom.

There are very few published accounts of teachers and therapists working together. By looking at the way that teachers view speech and language therapists and their work it may be possible to gain some insight into the why teachers and therapists do not work together more.

3.7 TEACHERS' VIEWS OF THE SPEECH THERAPY PROFESSION

In America Tomes & Sanger (1986) looked at educators' attitudes to the Speech-Language Services in public schools

in 2 states, using a 64-item questionnaire. The respondents included classroom teachers, learning-disabilities teachers, principals and psychologists. There was a 46% response rate. The findings indicated that the educators viewed speech and language programmes favourably. Teachers thought that therapists communicated well but they were not impressed by suggestions the clinicians made about classroom management. The teachers also felt that the therapists did not supply enough in-service courses.

In a 27-item questionnaire used in Melbourne by Hopkins, Kanaris, Parsons & Russell (1986), a 93.5% response rate was achieved. The authors asked teachers about their attitudes to speech pathology, their satisfaction with their own knowledge in the field and their ability to identify speech and language problems. The researchers anticipated that their findings may well be different from those in the States because in Australia individual therapists are not assigned to every school. Contact was made with 4 schools in each of the seven metropolitan regions of the Ministry of Education, a total of 28 schools. After a phonecall with the principal at each school, seeking agreement to be involved in the project, 5 questionnaires were sent to each school. A total of 132 questionnaires was sent out, 129 people responded and 126 questionnaires were used in the analysis.

The teachers in Australia responded positively to speech therapy and felt relatively confident about identifying speech and language problems but still wanted more information. The teachers were neutral in their response to the suggestion that speech therapy should be classroom based.

In England Lesser and Hassip (1986) surveyed three professional groups who were potential referers to speech and language therapy - doctors, health visitors and teachers. They used an 18-item questionnaire using closed and open questions. It was completed by student doctors, nurses and teachers and qualified doctors, nurses and teachers. The results indicated that qualified teachers thought fewer children would be helped by speech and language therapy than did the student teachers. This could indicate increased input at initial training or cynicism in qualified teachers. However, teachers were the least well informed in all areas related to speech and language therapy. They were unaware of the speech and language therapists' work in a number of types of schools, less certain of the range of work and ill informed about a speech and language therapist's education. These results are worrying when one considers teachers to be the first ones to possibly identify some communication problems.

A small scale study by a speech and language therapist in the Moderate Learning Difficulties (MLD) school where she worked (Jackson 1992) produced responses which were similar to the Lesser & Hassip study. The teachers were confused about the areas of work covered by a therapist. They did not understand 'speech therapy jargon'.

These findings indicate a need to inform teachers about the work of speech and language therapists and perhaps begin the process of collaborating at an early stage in professional development.

3.8 EVIDENCE OF SPEECH AND LANGUAGE THERAPISTS WORKING WITH TEACHERS

David and Smith (1987) report an attempt to help teachers and speech and language therapists collaborate while training. Rachel David and Beryl Smith (1987) organised an innovative exercise to 'promote the concept of collaborative work between teachers and speech and language therapists amongst students of those two disciplines'. Staff at Westhill College of Education and the School of Speech Therapy, Birmingham Polytechnic planned an exercise where students, at roughly the same stage in their training, from each establishment were paired off to observe a child with speech and language problems. They had to visit the special school together, see the child and write a report

containing recommendations for activities which teachers could carry out in the classroom. Soon after the event student evaluation about the exercise was elicited by means of a questionnaire.

To evaluate the long term effects of the exercise, speech and language therapy students were asked to complete a questionnaire 15 months after the project. This time the whole year group was asked to complete the questionnaire thus providing a comparison group, as not all the year had been involved in the original collaboration exercise.

After the original exercise the students who took part in the project were positive about the experience. However, 15 months after the project, when the results of the follow up questionnaire were analysed, there was found to be very little difference in the responses of the two groups. The authors speculated that the lack of difference could be attributed to the effect of a recent 6 months clinical experience. There was one area of difference in the findings. This concerned the students' perceptions of the important factors which contribute to collaborative working. Students who had taken part in the original study felt that clear objectives were important facilitators of collaboration, whereas those non-participants stated that shared knowledge was important.

The project carried out by David and Smith (1987) is innovative, but one exercise during a demanding 4 year degree course is only scratching at the surface. The fact that there was no significant difference between the responses of the two groups of students indicates that practical experiences can result in as positive a result as a controlled exercise. The authors did not supply copies of their questionnaire within this report so it is difficult to evaluate the theoretical basis of its design. Personal correspondence indicates that the projects are continuing but there has not been any further published results.

Practising therapists have outlined the advantages of teachers and therapists working collaboratively. Whitehouse, Beazley and Jones (1987) are three speech therapists who had completed an Advanced Specialist Diploma in working with the Hearing Impaired. They were supporting such children in mainstream and special schools. The imbalance of therapists to teachers of the deaf, in Leeds indicated a need for a partnership approach to the children. The authors stress the importance of maintaining such a partnership. Unfortunately there has not been any evaluation of the partnerships as yet.

SUMMARY

Collaboration involves equality, joint work with a child and shared aims. Therapists need to look for alternatives to individual therapy firstly to improve the efficacy of their intervention and secondly out of necessity because there are not enough therapists to see all the children who require speech and language therapy support. Collaboration appears to be a positive way for speech and language therapists to work with teachers to help children with communication problems.

Two theoretical models were reviewed in this chapter when thinking about collaboration. The first one was Social Exchange Theory (Homans 1958; Blau 1964,1986). This enables the professional skills and knowledge of therapists and teachers to be conceptualised as the currency of exchange. Thus one could try to identify the profit and costs, in other words the benefits and losses of collaboration. This approach would also make it possible to investigate whether teachers and therapists learn from each other when they collaborate.

The second theoretical model was Contact Hypothesis (Allport 1954) This suggests that when there is a superordinate goal and people spend time working together towards that goal, then the conflict between them is reduced. The review of

teachers' views of speech and language therapists indicated that there are areas of conflict. These are around classroom management and appropriate referral for speech and language therapy. As some therapists have more contact with teachers than others, it would be possible to explore the influence of increased contact on the reduction in conflict and the amount and type of collaboration between therapists and teachers.

As this chapter reveals, there is little written about how speech and language therapists and teachers work together to help children with communication problems. The small amount of research carried out during undergraduate courses (David and Smith 1987) suggests that clinical experience dilutes the effect of specific practice in undergraduate training.

It was in this situation that this research was started. The initial aim was to be able to describe current patterns of collaboration between speech and language therapists and teachers and to investigate the factors which facilitated collaboration.

The speech and language therapy profession is a relatively small one. To try to discover the patterns of collaboration between therapists and teachers a survey was carried out among speech and language therapists. Use was made of both

closed and open questions to try to elicit therapists practice and thoughts on this issue.

An interview procedure was devised using the Social Exchange Theory and Contact Hypothesis. This was carried out with pairs of therapists and teachers who worked together to try and understand the rationale successful collaboration.

The research described in the subsequent chapters was trying to answers the following questions :-

1. How do speech and language therapists respond to teachers concerns about children who have communication problems ?

How do speech and language therapists work with such children and their teachers ?

2. Does the work base of both the teacher and speech and language therapist influence collaboration ?

3. Is there a different pattern of contact and subsequent collaboration for pre-schoolers and school age children ?

4. When collaboration does occur between teachers and speech and language therapists what form does it take ?

5. How do the knowledge and skills of the teacher and the speech and language therapist enable them to meet children's needs ?

6. What are the implications for the delivery of services for children with communication problems ?

The following chapter reviews the available methodology for this research and provides a rationale for the approach that was chosen.

CHAPTER 4

GENERAL METHODOLOGICAL ISSUES

To answer the questions raised at the end of the last chapter it is necessary to explore the following areas :

- how speech and language therapists respond to teachers' concerns about children with communication problems;
- how the work base of the therapist can influence collaboration;
- the variation in the types of collaboration.

The process of collaboration between speech and language therapists and teachers also needs to be described. This process includes how initial contact is made between teachers and therapists as well as the sequence of events which follows on from first contact. The information which needed to be collected to answer the questions at the end of the previous chapter covers two main forms of data :

- factual details about speech and language therapists and their work;
- elicitation of opinions and attitudes.

This information was gathered using a questionnaire but it only represented the views of speech and language therapists. A further set of data was collected, using interviews, from both teachers and therapists drawing on theories relevant to collaboration. Thus the research was carried out in two phases and is described in this way in the following chapters.

The detail of the questionnaire and interview content will be dealt with in chapter 5 and 6 but it is appropriate to provide a general description of these two methods of data collection within this chapter. The data to be collected fell into three types :-

- quantitative data collected via the closed questions in the questionnaire
- qualitative data collected via written responses to the open questions
- qualitative data consisting of recorded responses collected during the interviews with the teachers and therapists

In this chapter the rationale for the choice of methodology for both types of data collection will be considered. There will also be a consideration of the important issues which

influenced the design of both questionnaire and the interview.

4.1 CHOICE OF DATA COLLECTION METHODS

The factors which influenced the choice of methodology used to collect the data for this research will be outlined in three sections. The first section will draw on the writer's knowledge of existing conditions within the speech and language therapy profession. The second section will consider the use of qualitative methodology with particularly reference to grounded theory. The final section will look at the use of theoretical frameworks such as Contact Hypothesis and Social Exchange Theory in relation to collaboration and the way in which they were used in the analysis of the interview responses.

4.1.1 EXISTING CONDITIONS

To try to 'describe the nature of existing conditions' (Cohen and Manion 1989), speech and language therapists needed to be contacted in a variety of geographical areas. As stated in chapter 3, the delivery of speech and language therapy services to children with communication problems varies depending on the location. The research methodology chosen for this type of investigation was, therefore, one which enabled contact to be made with a large number of

professional people who were spread over a wide area, in as short a time as possible.

The use of a survey appeared to be the most appropriate way to gather together previously uncollected information from such a widely dispersed group. A questionnaire 'tends to be more reliable; because it is anonymous, it encourages greater honesty' (P.319 Cohen and Manion 1989). The information which was to be collected would be influenced by the design of the data collection tool which in turn is shaped by the questions to be asked and the sample availability.

Although at the start of this study there was little published evidence on therapist and teacher partnerships, the writer had considerable professional experience and detailed knowledge of one of the professional groups, that of speech and language therapy. This enabled the researcher to consider a possible framework of initial conceptualisations of the patterns of contact which may be expected.

This tentative framework allowed for the development of sets of categories to emerge following a detailed consideration of the data.

4.2 QUALITATIVE RESEARCH METHODOLOGY

At the start of this research there was no published information about patterns of collaboration between speech and language therapists and teachers, or a rationale for any patterns which may emerge. Therefore there was a need to look initially at the current situation, so a naturalistic paradigm was required. The emphasis was on moving from the data towards the theory.

The work of Glaser and Strauss (1976) has been influential in developing a form of analysis which may be used in such a situation. This has been called "grounded theory". The label "grounded theory" acknowledges that the theory arises from, or is obtained from social research. Henwood and Pidgeon (1992) suggest that there are two uses of the term 'grounded theory'. One is the use of the specific data analysis techniques formulated by Glaser & Strauss (1976), while the other refers to the theory which may be generated while closely looking at and analysing qualitative data.

This latter approach has been used and developed by Miles & Huberman (1984). They acknowledge that qualitative research lies between the two extremes of 'tight, prestructured qualitative designs and ..loose, emergent ones'. (1984 p. 27)

4.3 THEORETICAL FRAMEWORKS IN RELATION TO COLLABORATION

In the second phase of data collection for this piece of research two theoretical frameworks were selected, as described in the previous chapter, to attempt to explain collaboration between teachers and therapists. These were Social Exchange Theory and Contact Hypothesis. They were both used when designing the interview schedule which was felt to be an appropriate way of collecting data.

A research interview was used to enable the interviewer to follow up ambiguous answers and probe respondents' replies which could not be explored via a postal questionnaire. Cohen & Manion (1989) suggest that an interview can have three purpose :

- to gathering information which is directly relevant to the research;
- to test a hypothesis;
- used in conjunction with other research methods.

In this study, the interview complemented the previous use of a questionnaire and facilitated more in-depth investigations into questions which arose from the theoretical approaches.

A common set of interview questions were given to all those who were interviewed. This enabled the data to be collected in a systematic way. It was then possible to make

comparisons across collaborating pairs in different settings.

In the previous three sections it has been possible to outline the factors which influenced the choice of methodology. In the next part of the chapter the issues of sampling, which also influence the choice of tool for data collection will be considered.

4.4 SAMPLING

4.4.1 QUESTIONNAIRE SAMPLE

There needed to be an equal chance of all speech and language therapists working with children being contacted in this research to ensure that the information collected was representative of therapists working with a paediatric caseload. There was a risk that information would be collected from a self-selecting group who are particularly interested in the topic or therapists in urban areas who are easier to make contact with.

Since it is not mandatory for all speech and language therapists to be members of the College of Speech and Language Therapists (CSLT) in order to practise as a therapist, there was no complete list of all the speech and language therapists working in the U.K. This presented a

problem when considering the size of the sample for this survey. One possible way of dealing with having no direct sample source is to use an initial group to make contact with a second group.

District Speech Therapy Managers (DSTM) were, at the time of this research, responsible for the deployment of speech and language therapists. This group of managers was therefore used as the initial group through which contact was made with individual therapists.

At the time of making contact there were 15 Regional Health Authorities in England and Wales. These were divided into 198 District Health Authorities. Some District Health Authorities had not appointed a District Speech Therapy Manager (DSTM) and in some areas the DSTMs managed a service across several districts. The initial group to be sampled contained 198 DSTMs.

4.4.2 INTERVIEW SAMPLE

A small criterion sample of twenty pairs of 'willing collaborators' was chosen for this investigation. They were therapists and teachers who appeared to be working together and they agreed to be interviewed about this way of working. All the people interviewed worked either in an inner city

or rural area which was accessible to the single interviewer.

The possibility of talking to pairs of professionals who had tried to work together and failed was considered but discarded. There were several reasons for this. Firstly, one may have been collecting information retrospectively. This would call into question the accuracy of the interviewees recall and factors which may have influenced their reflections on the situation. Secondly, looking for any common features in an apparently successful situation would appear to offer immediate recommendations about future practice and training. Thirdly, the investigation of an ongoing, working relationship offered a way of trying to understand such a partnership using two different theoretical approaches.

To try and eliminate any professional bias towards one particular professional group, ten teachers and ten therapists were contacted. They were asked if they were willing to be interviewed and if the therapist or teacher they worked with would also be interviewed.

In the first stage of this research the sample was drawn from one professional group, speech and language therapists. In the second stage of the study both teachers and therapists were contacted. Earlier in this chapter an

explanation was provided for choosing a survey methodology and the reader will be aware that a postal questionnaire and an interview procedure were chosen for this research. The detailed rationale for choosing these two procedures will now be given. This will involve considering the advantages and disadvantages of a range of survey methodology.

4.5 RATIONALE FOR THE CHOICE OF SURVEY METHODOLOGY USED IN THIS STUDY

There are a variety of methods of collecting data for a survey, including direct observation, face to face and telephone interviews as well as a postal survey. The possibility of using direct observation in this study was rejected because there was only one researcher. The researcher had limited time and finances which would have prohibited travel over a wide area.

Consideration was given to each of the other possible methods before a suitable method was chosen. The advantages and disadvantages of each approach are considered below.

- Face to face interviews
- Telephone interviews
- Postal survey

4.5.1 Face to face interviews

Nachmais & Nachmias (1976), Hoinville & Jowell (1978), Backstrom & Hursh-Cesar (1981) all write of the advantages of this method. A personal interview offers the opportunity to explore the respondent's feelings on a subject. Complex topics can be dealt with where the interviewer can probe the respondent's replies so that an unambiguous answer is obtained. The physical presence of the interviewer may help to hold the respondent's attention and may encourage continued participation in the interview.

However the financial cost of personal interviews is high if a large number of respondents, in different geographical areas, are to be interviewed. The interviewer will then be involved in a considerable amount of travelling. If more than one interviewer is used, training sessions need to be organised to reduce variation in interviewer style. However, the interviewer's behaviour cannot be controlled during the data collection and bias may occur.

As contact with as many therapists as possible, in a variety of work settings and geographical areas, was required in the first part of the study, the use of personal interviews for the initial stage of collecting the data was rejected but remained a strong possibility for a second data collection exercise.

4.5.2 Telephone interviews

This method relies on the respondent having a telephone to which they have easy access. Then the researcher has a quick and relatively cheap way of gathering information from a wide geographical area. The data is available as soon as the call is completed. If more than one interviewer is being used, the researcher can monitor the behaviour of all the interviewers when they are on the telephone. Those using this approach have shown that the data collected by telephone is comparable to that obtained from personal interviews.

Speech and language therapists need access to a telephone when working, either to receive messages from, or to make contact with, clients or other professionals. However, if there is a telephone in the speech and language therapy department the therapist will have to answer the phone personally, as there is rarely secretarial support. This can happen when a client is in the room. It is more common therefore in many schools and clinics they may only have access to a telephone at certain times.

It was felt that an interview by telephone, in such a situation, could be extremely disruptive. This would not help the therapist to answer questions clearly and

accurately. For these reasons use of a telephone survey was discarded.

4.5.3 Postal survey

The researcher using a postal survey has no control over the respondent's behaviour when they complete the questionnaire. They cannot be sure that the right person will fill it in. The respondent might discuss the contents, and possibly the answers, with other people. Thus the questionnaire would collect the views of a group rather than the individual.

There is also the risk that the response rate may be low and so the sample is self-selected. A postal survey does reduce bias errors which may arise from the personal characteristics of an interviewer, also the respondent is able to complete the questionnaire in their own time and can look up any factual information which may be required. A postal survey allows a large number of people to be contacted.

Moser and Kalton (1971) and Backstrom and Hursh-Cesar (1981) state that the use of a postal questionnaire is particularly useful with a professional group, where the topic being explored via a questionnaire is of interest to the members of that group. With regard to the subject matter of this research this certainly applies to the speech and language therapy profession as the profession is currently

discussing the ways in which therapists and teachers work together. The College of Speech and Language Therapists had set up a Working Party on Educational Matters (1988-90). There appeared to be strong support for research into this topic within the profession.

It was felt that a postal survey would be well received as much of the information sought in this research was of a factual nature but some questions explored the opinions and attitudes held by speech and language therapists about working collaboratively with teachers. It was felt that the use of a questionnaire would allow therapists an opportunity to reflect on their practice and look up information if necessary

Despite some of the disadvantages of using a postal survey as outlined above, it was decided that the advantages of a postal survey made it the most appropriate method for the first part of this research. As there can be a very high non-response rate when using a postal survey, possible ways of ensuring a reasonable rate of return were considered. These are described in the section below.

4.6 NON-RESPONDENTS

In trying to ensure as high a rate of return as possible, the research on increasing the return rate of questionnaires

by personalisation of questionnaires was studied. Unfortunately the findings were very mixed. Horowitz and Sedlacek (1974) mailed a questionnaire to 600 faculty members at the University of Maryland using 10 combinations of the variables of type of signature, type of reproduction and status of researcher. The results indicated that none of these variables influences the return rate. This could have been due to the very specific population the researchers were investigating.

In the study by Worthen and Valcarce (1985) 1,000 questionnaires were sent to teachers. The covering letter was either personalised or mimeographed. The initial response rate was increased with a personalised covering letter but this increase was not statistically significant. This study had a very low response rate. So the researchers carried out a non-response bias check on 100 randomly selected non-respondents. They found that poor timing had influenced the return rate. The researchers had sent out their forms at a very busy time of the school year. Therefore variables other than personalisation of the questionnaire appeared to be influencing the return rate.

The studies described above were concerned with improving the response rate for the questionnaire form as a whole. These points were kept in mind when selecting a time to send out the questionnaire and the personalisation of the

covering letter. However it is also important to consider the non-responses which may occur within a questionnaire.

A certain type of non-response may be predicted if the design of the questionnaire uses a filter question. In this situation a certain number of respondents will be expected not to answer a question. When a single question is not answered or the respondent suddenly appears to have stopped answering the questions, these non responses may be more difficult to explain. The person analysing the data must try to establish whether the respondents who do not answer a question are significantly different from those who have answered. Initially the original questions will need to be scrutinised to ensure that there is nothing in these questions which has caused them to be over looked.

An attempt was made to reduce the number of non-responses in this study by bearing in mind the points made in the preceding section. Respondents will also be influenced by other issues, for example the appearance of a questionnaire. These points are discussed in the following section.

4.7 THE DESIGN OF A POSTAL QUESTIONNAIRE

The self-completion questionnaire is a learning process for the respondent and this needed to be considered when organising the sequence of questions on the form. In

designing a questionnaire the initial questions should be used to gather factual information and the later questions could be open or of a more personal nature.

Phillips (1981) also suggested the following ideas for producing a high quality questionnaire with a high return rate.

1. Clear type-set and use of colour and filter questions clarifies the structure of a questionnaire.

In this research, the use of filter questions needed to be considered when trying to identify therapists who had worked with teachers from those who had not. Also different coloured paper was used to distinguish the two groups of therapists, the school based from the clinic based therapists.

2. Instructing respondents to record their answers by placing ticks in boxes appears to aid clarity.

This recommendation was used when designing the questionnaire for this study.

3. The use of sublettering with question numbers for example, Q.3(a),(b),(c), is common practice either to group questions on a similar topic or to encourage the respondent to complete by not making the final question number too high.

4.The instructions to the respondent need to be clear and specific as there is no interviewer to repeat the instructions.

5.As the respondent becomes more at ease with the questionnaire while it is being completed the most difficult questions should come towards the end. Also questions of a high interest near the end encourage completion and return.

4.8 OPEN AND CLOSED QUESTIONS

In this research a combination of both open and closed questions were used. Closed questions which require the respondent to select a pre-structured response or provide factual information are quicker to complete and easier to code. A coding system for the closed questions used in this study was developed as the questionnaire was being designed, which is a recommendation made by Oppenheim (1992). The analysis can then be a rapid process.

A questionnaire which is completed by the respondent does not allow the researcher to explore any of the replies. This means that the questions need to be very specific. Gaskell, Wright & O'Muircheartaigh (1993) state that when the target behaviour is relatively well defined, that is the question is very specific, then meaning shifts should not occur between respondents. This reinforces the need for

alternatives used as responses in closed questions to be as carefully considered as the questions.

Closed questions do not allow the respondent any opportunity to express their own views, which can be frustrating. For this reason the questionnaire needs to be balanced by using open questions.

Open questions allow the respondent to state their own views or feelings and for this reason they were incorporated into the questionnaire used in this study. The use of another method of data collection such as interviewing would also provide an opportunity to collect the views of respondents. This approach was used in the second stage of the research. The responses can then be analysed using a qualitative methodology referred to later in this chapter.

A problem with the analysis of questionnaires can be the risk of subjectivity. One way of trying to reduce this aspect is to use other people to code the data and then look for inter-coder reliability. This is referred to in more detail later on in this chapter.

4.9 THE STRUCTURE OF THE QUESTIONNAIRE USED IN THIS RESEARCH

The questionnaire was designed bearing in mind the recommendations made by Phillips (1981) and those of Oppenheim (1992). A copy of the questionnaire can be seen as appendix 4a and 4b.

The questionnaire was divided into two main sections. The first section consisted of closed questions which required factual information in response to the questions and the second part consisted of open questions.

Within the first main part of the questionnaire there was a filter question which separated those therapists who had worked closely with teachers from those who had not. The latter group were instructed to move on to the second part of the questionnaire, the open questions, which all respondents completed, while the group of respondents who had worked with a teacher answered a range of questions about that experience.

4.9.1 PILOT STUDY OF THE QUESTIONNAIRE

The questionnaire was piloted twice. The first time with therapists known to the researcher, who were verbally debriefed after completing the task.

This activity provided information about the time taken to complete the questionnaire and identified ambiguities. One alteration which was made after this pilot was to clarify the filter question so that it was more specific.

A second pilot took place after these alterations were made. This time ten copies of the questionnaire were sent to speech and language therapists in and around the London area. These therapists were not known personally by the writer. The return rate on these questionnaires was 70 % and all those which were returned were completed in an acceptable way.

A coding booklet had been designed before the questionnaire was sent out and the replies to the closed questions were coded onto coding sheets by the researcher. These were then entered onto the computer and analysed using the SPSS-X package to establish percentages and means. After this the final version of the questionnaire was ready to be sent out.

4.9.2 ANALYSIS OF QUESTIONNAIRE DATA

The analysis of the data from the open questions drew heavily on the methodological frameworks proposed by Miles and Huberman (1984).

Miles and Huberman (1984) in their book describe their work with qualitative data collection methods and analysis both within and across sites. They suggest that work begins with a 'rudimentary conceptual framework and a set of general research questions'. They assume that data collection methods will also be considered at this time. Miles and Huberman see qualitative research as dealing with 'words' rather than numbers and the words are much 'bulkier' to deal with. So they developed a system of coding the data using either descriptive, explanatory or interpretative codes. This enabled the material to be looked at and manipulated in a manageable way. The codes represent categories which are being used to encapsulate the substantive issues arising from the data.

In this research the written responses to the open questions were coded, using the Miles and Huberman (1984) approach, according to particular patterns and themes which occurred repeatedly in the data. This enabled the data to be grouped according to the patterns which arose.

There were seven open questions, five of which required the development of a unique set of categories/codes to deal with the responses to each question. So five different sets of codes were devised to try to encapsulate the opinions and attitudes of the therapists. For two other questions, it was possible to utilise a common category system. These

questions explored the factors which facilitated and inhibited collaboration.

In the questionnaire data there were a vast number of discrete comparisons rather than multifactoral analysis. It was not felt necessary to subject the data to statistical analysis because the data collected in this research was predominantly descriptive; comparative questions were not being asked. Thus it was more relevant to deal with the quantitative data in terms of means and distributions.

The data was also used to indicate further questions which needed to be asked.

4.9.3 RELIABILITY EVALUATIONS

To try to ensure objectivity in the coding of the data from the open questions of the questionnaire and the interview data additional coders were used.

The written data from a 100 respondents were used to develop the categories required to code the rest of the responses. When the categories had been developed, the rules for assigning responses to specific categories were given to a second coder together with the data from 100 respondents. This second coder was not a speech and language therapist or a teacher.

The coding by the writer and the second coder were compared and levels of agreement were established.

A similar procedure was adopted with the interview data although in this case most of the categories had been established prior to data collection. A second coder was also used to analyse one-third of the data and establish acceptable levels of agreement with the writer.

A simple percentage of agreement was established by using the formula :

$$\frac{\text{Number of agreements}}{\text{Number of agreements} + \text{Number of disagreements}} \times 100$$

Miles and Huberman (1984) suggest that initially 'double coding' should result in 70% levels of agreement rising to 90% with continued use. Therefore, in this project, 75% and above were set as acceptable levels of agreement.

The information collected using the questionnaire was extensive but they only represented the views of the speech and language therapists not the teachers. In order to investigate what enabled some therapists and teachers to work together a more in-depth approach was required. It was at this point that interviews were conducted.

4.10 THE STRUCTURE OF THE INTERVIEW USED IN THIS RESEARCH

The interview led on from questions raised in the questionnaire and drew on two theoretical approaches to collaboration. The responses collected were recorded and then transcribed onto a word processor. A qualitative data analysis was then carried out.

The two theoretical frameworks, Social Exchange Theory and Contact Hypothesis, were analysed and their component parts identified. These were then used as a source for developing questions which could be used in the interview. Thus the aim of the questions was to elicit information which would either provide support for, or disprove, either or both theories. A detailed description of how the questions were developed is given in chapter six.

4.10.1 PILOT STUDY OF THE INTERVIEW

After the interview schedule had been devised it was carried out with a teacher and a therapist as a pilot study.

The people interviewed were working together and the writer knew of them but had not talked to them previously. They were interviewed and their responses were tape recorded. The interviews were conducted according to the same procedure as that planned for future interviews. There was a debriefing

session after the interviews to enable the interviewees to ask questions or comment on the procedure.

Some minor changes were made to the wording of the questions but there were no major changes required to the interview schedule. There were several minor technical issues which needed attention concerning the power source of the tape recorder, and positioning between interviewer and interviewee; but these were easily resolved before the final interviews took place.

4.10.2 INTERVIEW PROCEDURE

All the respondents were interviewed at their place of work, at a time convenient for them. At the start of the interview a general question was asked about the ways in which the interviewee collaborated with their professional partner. This was to allow them time to focus their thoughts on the interview and away from the activity that they had previously been involved in.

The interviews were all tape recorded. The teachers and therapists had given their permission for this to happen when they were originally contacted.

4.10.3 ANALYSIS OF THE INTERVIEW DATA

The interview questions were devised using the component features of Social Exchange Theory and Contact Hypothesis. This meant that the responses from the interviews were analysed using the categories developed from the two theories. Both the interview questions and the categories used in the analysis of the interview data were developed from the theories.

The data was analysed using the categories in order to see if 'there was a fit', that is, did either or both of the two theoretical approaches explain why teachers and speech and language therapists collaborated. A detailed analysis of these transcripts is provided in chapter 6.

The 'willing collaborators' were divided into two groups. In one group the therapist came to visit the teacher and the school but was not based there; the other group consisted of teachers and therapists who were based in the same school.

SUMMARY

This chapter outlined the methodology which was used for this research project. The rationale for the choice of methodology was given and some of the important points which were considered when designing both the questionnaire and

interview schedule were discussed. In the following chapters there is a detailed description of the design of the questionnaire and interview schedule; the analysis of the data and the results are provided.

CHAPTER 5

A SURVEY OF THE WAYS IN WHICH SPEECH AND LANGUAGE THERAPISTS COLLABORATE WITH TEACHERS

INTRODUCTION

In the previous chapter the rationale was given for choosing a postal questionnaire to collect information about the ways in which speech and language therapists collaborate with teachers. The survey was the first stage of the research, collecting quantitative and qualitative data in a written format. In this chapter the detailed structure and content of the questionnaire are described and then the findings from the survey will be presented.

Before the questionnaire was designed it was important to remember that the process of collaboration involves both circumstantial aspects as well as attitudinal factors. To gain access to this information it was necessary to try and analyse the process of collaboration at a functional level utilising the knowledge of the researcher.

While carrying out the analysis several models were developed, the detail of the analysis and the models will be presented in the next part of the chapter, which summarises aspects of the process of collaboration between

speech and language therapist to see a child but to have no contact with the teacher.

In the second option, often occurring during a school visit, the teacher consults the therapist about a child and, with parental permission, asks the therapist to see the child. The teacher is then using the therapist as a consultant. The third option is when a special needs teacher or other designated person acts as a coordinator between the visiting therapist and the class teachers. The coordinating teacher disseminates information from the speech and language therapist and raises, with the therapist, the teachers' concerns. The final option occurs when a therapist through an in-service course is able to consult with many teachers about several children. Although with the numbers of children involved the information that can be exchanged is general rather than specifically about one person.

5.2 FORM AND CONTENT OF THERAPISTS' CONTACT WITH A TEACHER

Therapists may make contact with teachers on a variety of topics and in different ways, which are summarised in the following figure.

SPEECH AND LANGUAGE THERAPIST -----> TEACHER

Written contact	Content of communication Initial contact with child Explaining child's problem Therapy commenced Seeking factual information Seeking teacher involvement Sending programme to school
Telephone contact	Same as written + feedback from teacher. A 2 way discussion To arrange a visit at short notice To alter appointment times Clarify information
Face to Face	Same as written + telephone Observation of child Screening

Figure 10. Form and Content of Therapist's Contact with a Teacher

5.3 SPEECH AND LANGUAGE THERAPISTS' PERCEPTION OF THEIR OWN ROLE

The way a professional perceives their own role can indicate how secure they are in their own work. Some areas may lend themselves to greater collaboration than others. These were considered when trying to identify the main areas of a therapist's professional life.

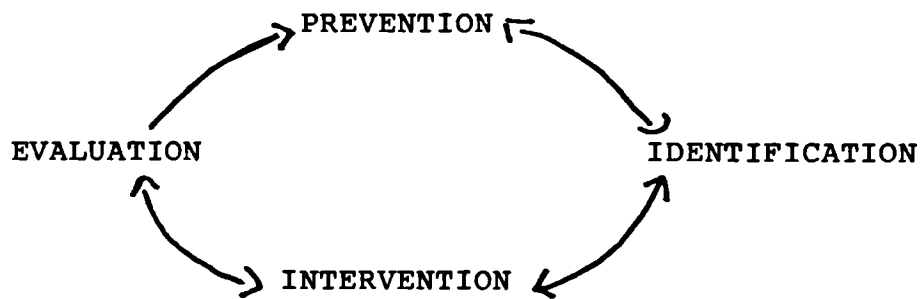


Figure 11. Main areas of a speech and language therapist's work.

The same areas would also be of interest to colleagues in education. Teachers would want to avoid classroom mismanagement which may make a communication problem worse. They will identify some speech and language problems and want to know how to intervene. It would seem that these areas offer opportunities for professionals to work together. These points were kept in mind when devising the questions to be used in the questionnaire.

Although teachers may identify some communication problems they are only one among many referring agencies to speech and language therapy. The potential referring sources were identified and are listed below. The list includes people who would refer children with possible communication problems, both prior to school entry and once the child has started school.

5.4 REFERRAL SOURCES FOR SPEECH AND LANGUAGE THERAPY

The people most likely to refer a child to a speech and language therapist are given below.

Parents

Health Service Staff - Health Visitor, G.P., School Doctor
Clinical Medical Officer, School
Nurse, Physiotherapist, Occupational
Therapist, Audiologist, G.P.

Education Staff - Nursery / Class teacher, Headteacher
Special School Staff

Psychologists - Clinical/ Educational psychologist

Figure 12. Referring agents to Speech and Language Therapy

When considering the process of collaboration between a teacher and a speech and language therapist thought was also given to whether a child was seen on an individual basis or with other children, in a group and the venue for this intervention.

The speech and language therapist may be based in a school or a clinic. The base seemed to have an influence on patterns of interaction between therapists and teachers. In this research an attempt was made to find out if the base was influential on patterns of interaction.

5.5 INFLUENCE OF BASE ON PATTERNS OF COLLABORATION

It was apparent from the researcher's professional contacts that therapists who were based in clinics worked in a different way from school based therapists. This could lead to varied patterns of collaboration and needed to be taken into account when designing the questionnaire. There would be some common questions which would be answered by all respondents and then others that differed as appropriate to the setting in which the therapist worked. A copy of the complete questionnaires can be found as appendix 4a and 4b.

As the work base of the therapist was such an important issue it was decided to make the two sets of questionnaires distinctive in appearance. This was done using two different sets of coloured paper, one colour for the questionnaires to be sent to therapists who were clinic based and another colour for those who were school based.

5.6 DESIGN OF THE QUESTIONNAIRE

Both open and closed questions were used in the questionnaire. Initially closed questions were used to verify the respondent's work base and to identify the type of communication problems each respondent dealt with. Questions were then asked about area of specialisation, the sources of referrals within the last two years and the

colleagues with whom they worked. This was followed by a series of questions applicable to a specific work base.

5.6.1 QUESTIONNAIRE FOR THERAPISTS BASED IN A CLINIC

The professional or parent who refers a child to a speech and language therapist may not have let the nursery or school know that they were making the referral. So therapists based in clinics were asked to indicate if they routinely made contact with a nursery or school if a child referred to them attended an educational establishment.

Information was also sought about whether the therapist would make contact with a school because a child had a particular type of communication problems.

Clinic based therapists make special arrangements to visit schools so they were asked specific questions about how easy it was to gain access into the school. They were asked about the availability of the class teacher and the flexibility of their timetable if discussion time was needed. They were asked to indicate the length of time spent on the first visit.

5.6.2 QUESTIONNAIRE FOR THERAPISTS BASED IN A SCHOOL

The school based clinicians were asked for information about the number of children in the unit/school where they worked, as well as the number of teachers and therapists.

This set of questions was intended to collect data about the environment in which the therapist worked. Some school based therapists have discussion time between themselves and specific teachers allocated in their timetable. A question about this issue was included to try to find out if this was common practice. Where discussions were not timetabled therapists were asked to indicate when the discussions did take place, for example, before or after school or during the lunchbreak.

Subsequent common questions asked of all respondents

In an attempt to try to elicit information about a therapist's actual practice when working with a school age child, use was made of a boxed paragraph which instructed therapists to think about a child they began to see 3-4 months ago. They were then to answer the subsequent questions with that child in mind.

The information sought in this section concerned the reasons that either a class teacher contacted them or they contacted the class teacher.

The therapists who met with the class teacher to discuss a child, were asked questions about the venue for such discussions, the length of time and satisfaction with the time allocated for the discussions.

Filter question

A filter question was used to separate those therapists who had never worked closely with a teacher from those who had. Those who responded positively continued on to the next question. If they indicated that they had never worked with a teacher, they were instructed to skip the next few questions and move on to the beginning of the open questions.

Those therapists who had worked with teachers, whether they were clinic or school based, were then asked a set of identical closed questions. These questions tried to establish the rationale for selecting a particular teacher to work with and the pattern of who assessed, planned and carried out a child's therapy. The venue for the therapy was also asked about.

5.6.3 OPEN QUESTIONS

There was a set of open questions that every respondent was asked to answer regardless of whether they had or had not collaborated with any teachers. These questions explored the the respondents' perceptions of their own role and that of the teachers, when working with children who had communication problems. They were asked if they believed that collaboration was important when working with these children and if so, what were their reasons for feeling like this. They were also asked to state what they felt inhibited and supported collaborative working practices.

The final two questions at the end of the questionnaire elicited the most personal information about the respondent. These included the length of time a therapist had been working and their route by which they had qualified as a speech and language therapist.

In order to draw together the points made above and to help the reader with the next section, the two versions of the questionnaire are given below. A dividing line down the page indicates when different questions were asked depending on the work base. Where no dividing line appears the same question was asked of both groups. An example of each questionnaire, giving the precise lay-out is provided in appendix 4a and 4b.

5.6.4 STRUCTURE OF THE QUESTIONNAIRE

THERAPISTS BASED IN A CLINIC | THERAPISTS BASED IN SCHOOL/UNIT

How many sessions a week do you work with children ?

If you specialise with ONE particular client group indicate below which one

- a) Language delay
- b) Specific language disorder
- c) Physical handicap
- d) Moderate learning difficulties
- e) Severe learning difficulties
- f) Hearing impairment
- g) Emotional disturbance
- h) Others please specify :

Please indicate which agencies have referred children to you in the past 2 years

- a) Parents
- b) Headteacher/teachers (Mainstream)
- c) Headteacher/teachers (Special school)
- d) Nursery school staff
- e) Day Nursery Staff
- f) Psychologists - clinical/educational
- g) Doctors - G.P.; SMO/CMO; Hospital
- h) Health visitors
- i) Audiologist
- j) Physiotherapist
- k) Occupational therapist
- l) Speech therapy colleagues

Are you based in ?

A community health clinic
A hospital
A diagnostic/assessment
centre
Other, please specify

How many children attend the
unit/school

How many speech therapists work
in work in the unit/school ?

Are therapists assigned to
certain classes or groups ?

THERAPISTS BASED IN A CLINIC | THERAPISTS BASED IN SCHOOL/UNIT

If a child you are seeing attends a nursery class or school do you ROUTINELY contact the teacher ?
[Contact may happen by 'phone letter or face to face meetings]

Please indicate which types of communication problems cause you to contact a child's school

- a) Language delay
- b) Language disorder
- c) Phonological delay
- d) Phonological disorder
- e) Articulation disorder
- f) Voice disorder
- g) Dysfluency

Are there any other reasons for contacting the school ?

How many teachers work in the unit/school ?

In the next section of the questionnaire, I am particularly interested in what actually happens in practice when speech therapists work with teachers. In order to help you think about what you do, choose a child who you began to see 3-4 months ago and answer the following questions with that child in mind.

For what reasons does a class teacher contact you ?
[Contact can be by telephone, letter or face to face meeting]

- a) A child is unintelligible to the staff
- b) Staff concerned about a child's speech/language
- c) To ask for a report on a child
- d) To ask about the type of therapy being offered
- e) To ask for advice about the management of a child
- f) Other reasons, please specify

When you contact the class teacher concerning a child you see for therapy is it to ?

- a) Gain more information for own decision making
- b) Explain the child's problem to the teacher
- c) Explain type of therapy offered
- d) Seek teacher's involvement
- e) Seek teacher's support
- f) Others, please specify :

When you visit a school are you usually able to talk to the class teacher ?

Is your discussion time with a class teacher scheduled in the timetable

If NO, with whom do you discuss the child ?

If NO, when do you discuss children of mutual concern

- a) The headteacher
- b) The special needs teacher
- c) Other, please specify :

On the first face to face meeting with a class teacher do you have to fit into the teacher's timetable ?

Do you talk in ?

- a) The classroom with children present
- b) The classroom with children absent
- c) A separate room
- d) In the staff room
- e) In the corridor

THERAPISTS BASED IN A CLINIC**THERAPISTS BASED IN SCHOOL/UNIT**

How long is your first visit to the school ?

- a) 0 - 10 minutes
- b) 10 - 30 minutes
- c) 30 - 60 minutes
- d) Over 60 minutes

Is the time negotiable ?

On subsequent visits to the same school, how long do you spend in discussion with a class teacher about a particular child ?

- a) 0 - 10 minutes
- b) 10 - 30 minutes
- c) 30 - 60 minutes
- d) Over 60 minutes

How long do you usually spend in discussion with a class teacher about a particular child ?

- a) 0 - 10 minutes
- b) 10 - 30 minutes
- c) 30 - 60 minutes
- d) Over 60 minutes

Is this sufficient time ?

Have you worked closely with any teachers ?

IF NO PLEASE TURN TO QUESTION XX [start of open questions]

Think of ONE teacher with whom you have worked. Answer the following questions keeping that working relationship in mind.

Why did you begin working with this teacher, was it because ?

- a) The teacher is the child's class teacher
- b) The teacher sought your help
- c) The teacher was suggested by the Head
- d) The teacher is interested in language
- e) The teacher has an additional qualification in language remediation

After the child's speech and language problem was identified who carried out the assessment ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

THERAPISTS BASED IN A CLINIC | THERAPISTS BASED IN SCHOOL/UNIT

Is the child's therapy planned by ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

Who carries out the therapy ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

Do you see the child for therapy in ?

- a) A group
- b) 1-to-1 situation
- c) A group and 1-to-1

Why do you work in this way ?

Where do you work with the child if you carry out the therapy ?

- | | |
|-------------------------------|-----------------------|
| a) In the classroom | b) In a separate room |
| c) In the speech therapy room | d) In the staff room |
| e) In the corridor | f) In the school hall |
| g) In the cloakroom | |

When a teacher and speech therapist work together with children who have communication problems, each professional brings different knowledge and skills. The following questions focus on these skills and knowledge.

What skills and knowledge do you feel teachers have when working with children who have communication problems ?

What skills and knowledge do you, as a speech therapist have when working with children who have communication problems ?

What factors do you think contribute to successful collaboration between speech therapists and teachers ?

What factors do you think inhibit speech therapist/teacher collaboration ?

Is collaboration between speech therapists and teachers important ?

If you believe it is important, please state your reasons for this view :

If you believe it is not important, please state your reasons for this view :

Has your relationship with teachers changed over the period of time that you have been practising as a speech therapist?

If YES, please state in what way it has changed :

What do you think could be done to improve undergraduate training in the area of collaborative work ?

How long have you been practising as a therapist ?

Please could you indicate how you trained as a therapist

- | | |
|----------------------------|----------------------------------|
| a) A 3 year degree course | b) A 4 year degree course |
| c) A 3 year diploma course | d) A 2 year post graduate course |

Figure 12 Questions used in questionnaire for clinic and school based therapists.

The two versions of the questionnaire were printed on two different colours, blue for clinic based therapists and yellow for school based therapists. They were then sent out to therapists. The process by which the subjects were selected is described in the following pages.

5.7 SUBJECTS

To obtain a representative sample of responses in this survey, speech and language therapists who worked for the National Health Service in England and Wales were contacted via their managers. The managers were asked to identify therapists currently working in their district, who worked

with children between the ages of 3 to 11 years and who were based either in a school or a health centre. The managers supplied the names and thus the numbers of therapists who worked for them and fitted the criteria described above. The specified number of questionnaires were sent to the managers.

The accompanying letter asked the therapists to complete a questionnaire about their methods of contacting and working with the teachers of children in nursery and primary schools, when the children had communication problems.

Speech and language therapists working in Scotland, Northern Ireland and for the British Forces in Germany were excluded from the survey. Those therapists working in the private sector or employed by organisations outside the National Health Service were also excluded from this study. This was because their terms of employment and the structure of the health service and educational organisation in which they work are significantly different from their colleagues in the National Health Service.

Initial selection of population to be sampled

The College of Speech and Language Therapists produces a booklet called the - District Speech Therapy Managers (DSTM) of the N.H.S. Regions, Districts, Areas and Boards.

The 1986 edition, which was the most up-to-date copy at the time of this study, was used to identify the DSTMs, listed under each Health District, to whom an initial letter would be sent.

The rationale for initial contact with the DSTM was to try to gain management support. The significance of the role taken by the DSTM cannot be ignored, any variation in the organisation of the Speech Therapy Services in a Health District is influenced by the Service Manager. This makes them potentially powerful people. It was hoped that with their support a high rate of return would be ensured. Also the DSTM would be able to approach all the therapists who worked for them, regardless of whether they are members of the College of Speech and Language Therapists or not. This would hopefully ensure contact with a wider group of therapists.

Contact with Speech and Language Therapy Managers

A letter was sent to every other DSTM listed in the CSLT booklet, in England and Wales, see appendix 1. A total of 97 DSTMs were sent letters which stated the topic of the research, the researcher's name and address and the name of the supervisor. The DSTMs were asked if they would be willing to involve their staff in this survey and hand out questionnaires. If the DSTM agreed then they were required

to send the researcher information about the number of therapists working with children in their district.

The letters to all the DSTMs were identical and typed, although the name and address of the DSTM was written in by hand. Each letter was individually signed and the envelopes were hand addressed.

The range of Health Authorities approached and the responses to the first letter can be seen in Appendix 2. The replies from the DSTMs were extremely positive. It indicated their concern about speech and language therapist and teacher collaboration. It was hoped that this positive response would be transmitted to the therapists receiving the questionnaires and hopefully encourage a high rate of return.

Questionnaire Mail Out

Out of 97 DSTMs who were contacted 75 (77%) replied stating their interest and the number of questionnaires they required.

This response rate and the positive tone of their letters provided reassurance that the topic being investigated was of relevance to the professional body.

The questionnaires were sent out to the DSTMs in the middle of November, after half-term.

The DSTMs indicated that they had 756 therapists working with children, some of whom were school based and the rest were health centre based. So 756 questionnaires were sent out.

The College of Speech and Language Therapists recorded that in October 1988 they had 2,769 full and part-time members, practising as speech and language therapists in the United Kingdom. Unfortunately, they do not have separate figures for England, Scotland, Northern Ireland and Wales. This makes it difficult to produce accurate figures of therapists working in England and Wales, especially as not all therapists belong to the College. Using these figures the questionnaire was being sent to possibly 27% of the profession.

The date for return was the end of the first week in December. On this day when the reminder letter was due to be posted there was a postal dispute in London and letter boxes were sealed. Therefore telephone calls were made to areas where therapists had not replied. A script was prepared and used by the caller to ensure that the same things were said during each call. The responses continued to arrive up to the end of the Autumn Term.

5.8 RESULTS OF THE SURVEY

The data collected from both the closed and open questions on the questionnaire will be outlined in the following section. First the sample population will be described, followed by the data collected from the closed questions answered by the clinic based and the school-based therapists. Finally the information collected from all the therapists, using the open questions will be presented.

Identification of the Target Sample

The analysis of the characteristics of the respondents who returned the questionnaires appeared to indicate that a relevant sample of speech and language therapists had been sent the questionnaires. Although the DSTMs were enthusiastic about this research topic and forwarded the questionnaires to what appeared to be their appropriate staff members there is no guarantee that the response from the DSTMs was representative.

Response Rate

Speech and language therapists returned 459 of the 756 questionnaires, giving an overall response rate of 61%.

The response rates from the clinic based therapists and school based therapists can be seen in the following table.

Table 1. Response rate from clinic-based and school-based therapists.

a) Questionnaires sent to clinic based therapists Number of returned questionnaires	415 239	58%
b) Questionnaires sent to school based therapists Number of returned questionnaires	341 220	64%

The returned questionnaires were checked to ensure that they were complete and that the respondent worked with children of the appropriate age range. As a result of this process 4 questionnaires from clinic based therapists and 12 questionnaires from school based therapists were not included in the analysis. These respondents worked solely with children either under 3 years of age who were not attending an educational establishment, or their clients were over 11 years of age.

Table 2. Final number of questionnaires analysed.

a) Clinic based therapists	235
b) School based therapists	208

The data obtained from this survey were analysed using the SPSS-X Release 3.0. Respondents who had not answered a question were described as 'missing cases'. There were on occasions two types of 'missing cases'. There were the respondents who failed to answer a particular question and those who did not answer a question because they followed the instructions in the questionnaire and were "filtered out". The latter group are not true non respondents. The first group of 'missing cases' needed careful analysis to try to ensure that they are not significantly different from those respondents who answered the question. Where appropriate, when describing the data, comments on the number of non-respondents will be made.

5.9 THE SAMPLE

The sample of therapists who responded to the questionnaires is described in the following section. Information about the therapists years of service, the manner in which they qualified and the amount of time they spend working with children each week is given. If they have an area of specialisation this is also given, along with an indication of the people who refer children to them.

The sample consisted of 235 clinic based-therapists and 208 school based therapists, from England and Wales. The list of

Health Authorities in Appendix 3 illustrates the wide geographical spread of the respondents.

5.9.1 YEARS OF EXPERIENCE

The clinic based therapists, on average, had been practising for 8 years ; 43% had 3 years experience or less and 57% had more than 3 years. Some had as many as 37 years experience.

The school based therapists had, on average, been practising for 9 years; 28% had 3 years experience or less and 72% had more than 3 years experience.

5.9.2 METHOD OF QUALIFICATION

The first degree course was established in 1964 at Newcastle University with the first cohort graduating in 1968. Up to this time a 3 year diploma was the only entry route to the profession. It was the mid-1980s before the profession became an all graduate entry. The data in table 3 shows the qualifications of the respondents.

Table 3. Qualifications of speech and language therapists

Qualification	Percent	
	Clinic N = 235	School N = 208
3 year speech therapy diploma	41	57
3 year degree	20	14
4 year degree	30	24
Post graduate qualification	7	3
No Response	2	2
TOTAL	100%	100%

This table shows the subjects responses in percentages. The frequencies of the responses were used when looking at an association between the base and the entry route of the therapists. This association is significant at the 0.05 level of probability (Chi= 12.161, df = 4).

Although nearly half the respondents had entered the profession through the 3 year diploma route, 50% of clinic based therapists as opposed to 38% school based therapists, were graduate entrants. This illustrates that the newly qualified therapists are more prevalent in the clinic based group. It is worth noting that for 74 respondents who had over 19 years experience, the 3 year diploma route was the only method of entry into the profession when they were training.

5.9.3 TIME SPENT WORKING WITH CHILDREN

The working week of a speech and language therapist is divided into 10 sessions, 2 sessions in each day. If the respondents indicated that they spent less than 10 sessions with children it was not clear whether this meant that they also saw adults or that they only worked part-time. For those respondents who indicated that they worked with children for 9 sessions in the week it is highly likely that the tenth session was an administrative one. Their responses are given as percentages in the following table.

Table 4. Number of sessions during the week worked with children.

Nos.of sessions	CLINIC BASED SLT Percent N = 235	SCHOOL BASED SLT Percent N = 208
1	0.0	1.4
2	4.7	12.5
3	8.1	10.1
4	8.5	9.6
5	13.2	10.6
6	12.8	13.5
7	7.7	5.3
8	10.6	7.2
9	8.9	5.3
10	25.5	24.0
TOTAL	100.0%	100.0%

The most common response in both groups was from therapists who spent all their working week with children. If one added

together the figures from those who spent all week working with children and those who spent nine-tenths of their week with children, then 34.4% of the clinic based therapists and 29.8% of the school based therapists spent all week with children. The association between the therapist's base and the number of sessions that they worked with children was significant at the 0.05 level of probability, $\chi^2 = 17.278$, $df = 9$.

All the clinic based therapists spent at least one day working with children and over 78% of the 235 respondents worked at least half of the week or more with children. Twice as many therapists who were school based rather than clinic based worked three or less sessions with children. There is the possibility that these may be therapists who only work on a part-time basis.

On the whole these therapists spent a considerable amount of their time with children. This would appear to indicate that their answers may be seen as relevant to this client group.

5.9.4 AREA OF SPECIALISATION

The respondents were asked if they specialised in working with any particular communication problems or with any particular client group. In both sets of respondents there were therapists who felt that they were not specialising in

either a particular type of communication problem or with a certain client group.

The therapists who work in clinics rarely indicate a specialisation. Only 29% (68) of respondents, out of a possible 235 therapists indicated a specialist area. Whereas the majority of school based therapists 82% (170), indicated they they were specialising in a specific area.

5.9.5 REFERRAL PATTERNS

The respondents were asked to indicate who had referred children to them in the last 2 years. There were no statistically significant differences between the referral patterns to both school and clinic based therapists.

Both clinic based and school based therapists seeing only children in the 5-11 year range received the majority of their referrals from staff in schools and from psychologists. Therapists seeing only children of primary school age received few referrals from parents.

Children under 5 years of age were usually referred by either colleagues who were also working for the Health Service or the parents.

Physiotherapy and occupational therapy colleagues made few referrals to speech and language therapy, probably because these therapists see fewer children with language difficulties.

SUMMARY OF SIMILARITIES AND DIFFERENCES BETWEEN THE TWO GROUPS OF THERAPISTS

The findings presented in this chapter indicate that both school based and clinic based therapists spend a large part of their working week with children who have communication problems. Although twice as many respondents in the school group worked 3 sessions or less with children.

On the whole it appears that therapists who are based in a Community Health Centre and therapists who are based in schools have different profiles. The therapists who are clinic based have been, on average, practising for a shorter period of time. Many more of the respondents in this group have less than 3 years experience and more of these therapists are graduate entrants to the profession. The group of school based therapists contains more people who have a diploma in speech therapy which suggests that they trained longer ago, when the diploma was the only professional qualification. They appear to have been working for more years than the therapists who are based in clinics.

The subject of specialisation was an issue that distinguished the groups from one another. Out of 235 clinic based therapists only 29% (68) of respondents stated that they had a specialist area. Whereas 82% (170) out of 208 school based therapists had a specialist area. These patterns supported the view that therapists who work in units or schools are more specialised in their area of work. This is in part determined by the setting in which they work and also by their own interest in particular types of communication difficulties.

The clinic based therapist is often involved in the initial and early identification of a wide range of communication problems, referring onto specialist therapists at a later stage.

There was no significant difference in the referral patterns between the two groups of therapists. Also, the age of the child being referred did not make a significant difference. Both groups of therapists had to make contact with a large number of professionals.

The differences can be summarised in the following way, the clinic based therapists are more likely to be graduates, are less experienced and generalists. The therapists in schools have more experience and see themselves as being specialists.

5.10 RESPONSES FROM CLINIC BASED SPEECH AND LANGUAGE THERAPISTS TO THE CLOSED QUESTIONS IN THE QUESTIONNAIRE

The next section of chapter 5 focuses on speech and language therapists based in clinics. These therapists have to make a special visit to a school if they want to see a teacher.

Although the respondents could indicate if they had more than one base only 5% (11) of the 235 respondents, did so. A Community Health Clinic (CHC) was the most commonly used base. This was reported by 88% (206) of the respondents. It is at such a base that the therapist will see clients and carry out administrative duties. Other bases referred to included hospitals and assessment centres.

When they were completing the questionnaire the clinic based therapists had to respond to a series of closed questions about their contact with teachers and the opportunities and venues used for discussion during a visit to a school. Their responses are given in the following part of the chapter. Where appropriate the responses from the therapists are displayed according to the age of the children with whom they are working. This enables comparisons to be made between the groups of therapists. This information is given as percentages. However, the frequencies of the therapists responses were used when testing for significance with Chi-square test.

5.10.1 ROUTINE CONTACT WITH SCHOOLS

Therapists based in a community clinic are often responsible for the speech therapy cover in local nursery or primary schools. The respondents were asked to indicate what their current practice was when making contact with teachers. This was to try to establish how their working relationships had developed.

If a child, who was attending a nursery school or primary school, was referred for speech and language therapy, therapists were asked if they routinely contacted the nursery or school. The contact could be by telephone, letter or face to face meetings. The following table shows the number of therapists who did, as a matter of routine, make contact with the school.

Table 5. Do Speech and Language Therapists make routine contact with the nursery or school of a child referred with a communication problem ?

RESPONSE N = 235	Percent
YES NO	61.7 38.3
Total	100.0

Over 61% of the respondents contacted schools as a routine procedure. When a therapist does not make contact with a school as a matter of routine, it raises two questions. The first is whether the therapist is aware of the potential educational problems associated with language disability. The second concerns the way the therapist views the teacher's role in language development and a professional partnership.

There is also the possibility that contact was not routine because the therapists perceived this to be a matter of confidentiality. The therapists may have known or believed that parents may not wish such contact to occur.

5.10.2 RATIONALE FOR THERAPISTS AND TEACHERS CONTACTING EACH OTHER

The therapists were asked which type of communication problem caused them to contact a child's school. Many respondents indicated that more than one communication problem caused them to contact the school. A statistical analysis was carried out on the data but no significant differences were revealed. This indicated that therapists, regardless of the age of the child, did not contact a school more often over one particular communication problems than another. So that they were just as likely to contact a

school if a child had a dysfluency problem or a language disorder.

When therapists were answering the next question about the reasons they were contacted by a teacher they were asked to think about a specific child that they had begun to see 3-4 months ago and to provide the following information with that child in mind.

Speech and language therapists working from a community clinic have historically been responsible for the speech and language therapy cover for schools in the clinic locality. Regular visits may be made on average once or twice in a school year.

The therapists in the community clinics were asked to indicate why they would make contact with the class teacher of a child having speech and language therapy.

The most common reason that a speech and language therapist was contacted by a teacher appeared to be because the child was unintelligible. This was true whatever the age of the child. However when a chi-square test was carried out there was no significant difference between this reason and the fact that staff may be concerned, need a report or want help with classroom management.

When responding to this question therapists were offered the opportunity of indicating whether there were any other reasons for them to contact the teacher. There were 7 respondents who said that they would contact the school if a child failed to attend any appointments. This highlights a problem of how staff in a school would know whether a child was attending therapy or not.

5.10.3 SPEECH AND LANGUAGE THERAPISTS' ACCESS INTO SCHOOLS

Therapists were asked to indicate how successful they were at seeing a child's teacher. There was an overwhelmingly positive response, 95% of the clinic based therapists were able to see the class teacher of a child they were concerned about. This would certainly indicate that the teacher is accessible to the therapists and an initial dialogue can take place.

When the questionnaire was designed there had been an expectation that therapists may not be able to gain direct access to the teacher. To cover this possibility the respondents were asked who they spoke to in this situation. It is interesting to note that in the replies to the previous question, only 8 therapists said they could not get access to the class teacher.

If the therapist could not speak directly to the class teacher then the head teacher was the person seen by 92% (59) of the 64 respondents to this question. Only 8% (5) therapists saw the special needs teacher. It is not clear whether this response pattern exists because there are a limited number of special needs teachers or the head teacher is seen as a matter of protocol on a visit to a school.

When the speech and language therapist visited a school and saw the appropriate teacher for a discussion of a child's problem they were asked to indicate if they had to fit into the teacher's timetable on this visit.

Table 6. Speech and language therapists fitting into the teacher's timetable on the first visit to the school

SLT Response N = 235	Percent
YES	69
NO	31
Total	100.0

Over two-thirds, 69% of the respondents said they did have to fit into the teacher's timetable. This was an expected response as it would indicate that teachers were not able to make arrangements to be released from the classroom in

order to talk to the visiting therapist. Although the responses from 31% of the therapists suggests that some schools can and do make arrangements for a class teacher to meet with a visiting therapist during expected class contact time.

5.10.4 VENUE FOR DISCUSSION AND TIME SPENT IN DISCUSSION

The venue for the discussions between these two professionals was varied. The therapists could indicate whether they saw the teacher for discussion in the classroom with or without the children present, in a separate room, the staff room or the corridor. Different venues may be more private for confidential discussions and some may be easier places in which to concentrate. A classroom full of children does not represent the optimum place for a discussion, even in an empty classroom there is the potential for interruptions from both children and adults.

The responses given to this question were very similar regardless of the child's age. All venues, apart from the corridor, were used by all the respondents. There was nothing to indicate that one venue was favoured more than another. This was supported by statistical analysis, when the use of a chi-square test produced non-significant results.

The clinic based therapists were asked twice about the time spent in discussion with a teacher. This enabled a comparison to be made about the differences in the length of time spent in discussion between a first visit about a child and any subsequent visits. Also it is necessary to remember that a clinic based therapist has to make special arrangements to visit a school and sometimes a considerable amount of time is spent travelling. Therefore one would expect therapists to be looking for quality and possibly quantity in their discussion time.

Table 7. Time spent in discussion on first contact with teacher.

Time Total N = 235	SLT working with children under 5 years N = 72 %	SLT working with children 5 - 11 years N = 73 %	SLT working across both age groups N = 90 %
0-10 mins.	5.6	5.5	8.9
10-30 mins.	36.1	42.5	32.2
30-60 mins.	38.9	41.1	33.3
Over 60 mins.	19.4	10.9	25.6
	100.0	100.0	100.0

Speech and language therapists who were clinic based indicated that they spent anything from 10 to over 60 minutes in discussion with a teacher, on a first visit.

The difference in the time speech and language therapists spent in discussion on the first contact with the teacher

was not significant at 0.05 level, Chi-square = 7.286, df = 6. It would seem that out of the 4 time allocations, the two extremes, that is under 10 minutes and over 1 hour appeared to be infrequently used.

The most frequent time spent on subsequent visits to a school was 30 minutes and under. This was the situation whatever the age of the children being discussed. Although, when a Chi-square test was carried out, there was no association between the time spent on these visits by the therapists and the age of the children.

5.10.5 FLEXIBILITY AND SATISFACTION WITH THE TIME FOR DISCUSSION

A teacher's timetable is often not that flexible and many respondents to an earlier question said that they had to fit in with the teacher's timetable. Therefore, the responses to the possibility of negotiating the time for discussion with the teachers was encouraging. There were 224 therapists who answered this question and 95% (213) of them stated that they were able to negotiate about the discussion time, only 5% (11) of the therapists felt that this was not possible.

The therapists were then asked to indicate whether these time periods were sufficient. Speech and language therapists often complain about the lack of time they have for discussion, so a negative answer to this question had been expected. Yet the responses are positive.

Out of 219 respondents, 71% (155) stated that it was sufficient time. Only 29% (64) clinic based therapists stated that it was not enough time. Several stated that if this time allocation was not sufficient, then they would have arranged extra time.

At this point in the questionnaire there was a filter question. Therapists who had never worked closely with a teacher were instructed to omit the next section and to continue on to the open questions. Those who had worked closely with teachers continued with the closed questions.

5.10.6 THERAPISTS WHO HAD WORKED CLOSELY WITH A TEACHER

The next table indicates how many clinic based therapists in this survey had worked with teachers.

Table 8. Clinic based speech and language therapists who have worked closely with a teacher

Worked with a teacher N = 235	Percentage %
YES NO	70 30
Total	100

The overall response to this question indicated that more clinic based therapists had worked with teachers than had not. This was an unexpectedly positive result. Although the fact that 30% of the respondents had never worked closely with a teacher, cannot be understated.

The 30% of the respondents who have never worked closely with a teacher will not be included in the figure presented in the last part of this section. The next section will refer to the 165 therapists who have worked closely with a teacher.

5.10.7 RATIONALE FOR THERAPIST SELECTING THE TEACHER THEY WORK WITH

Therapists who had indicated that they had worked closely with a teacher were asked to indicate why they had chosen to work with that particular teacher.

The rationale, used by a therapist, for selecting a teacher to work with appears to be the same whatever the age of the child. There was no significant difference between the reasons for choosing a teacher. Although on initially looking at the responses it appeared as though the child's class teacher seemed to be the most common choice.

5.10.8 THERAPIST AND TEACHERS' PATTERN OF WORK WITH A CHILD WHO HAS A COMMUNICATION PROBLEM

The speech and language therapists who indicated that they were working with teachers, to help the child with a communication problem, were asked to indicate how they worked with the teacher.

The therapists were asked which professional assessed the child's speech and language problem. The subsequent questions were about the planning and intervention procedures. The respondents could indicate if more than one

person was involved in the assessment, planning and intervention procedures.

Table 9. The professionals who assess the child's speech and language problem

Professional Total N = 165	SLT working with children under 5 years N = 63 %	SLT working with children 5 - 11 years N = 79 %	SLT working across both age groups N = 23 %
SLT	88.9	93.7	82.6
Joint	11.1	6.3	17.4
	100.0	100.0	100.0

It would appear that whatever the age of the child the speech and language therapist usually carries out the assessment. However, when a Chi-square test was carried out the result was not significant at the 0.05 level, Chi = 2.722, df = 2. There is no association between the age of the child and the professional carrying out the assessment

Table 10. The professionals who plan the therapy

Professional Total N = 165	SLT working with children under 5 years N = 63 %	SLT working with children 5 - 11 years N = 79 %	SLT working across both age groups N = 23 %
SLT	66.7	63.3	65.2
Joint	33.3	36.7	34.8
	100.0	100.0	100.0

The responses to this question seem to indicate that the therapist usually planned the therapy. However, when a Chi-square test was used the result was not significant. There was no apparent association between the age of the child seen by the therapist and the people who planned the therapy. It is interesting to note that nearly a third of all the therapists were involved in some joint planning for all three groups. The teachers on their own certainly do not plan the therapy.

Therapists were asked who carried out the therapy or intervention procedure. The respondents could indicate a specific individual or a joint approach by the teacher and therapist.

Table 11. The professionals who carry out the intervention procedure

Professional Total N = 165	SLT working with children under 5 years N = 63 %	SLT working with children 5 - 11 years N = 79 %	SLT working across both age groups N = 23 %
SLT	31.7	27.8	34.8
Teacher	14.3	8.9	21.7
joint	54.0	63.3	43.5
	100.0	100.0	100.0

The responses to this question indicate that there are some teacher/therapist partnerships. The joint delivery of therapy appears to be a common pattern across all three

groups. If therapy is carried out by only one professional then it appears that it is more likely to be the therapist than anyone else. However, the Chi-square test is not significant at the 0.05 level, $\chi^2 = 4.257$, $df = 4$.

5.10.9 THERAPY REGIME OFFERED TO CHILD

Therapists were asked to indicate how they offered intervention. They could indicate whether the child they saw was seen in a group, individually or a mixture.

Table 12. Therapy regime offered to a child

Therapy Regime Total N = 165	SLT working with children under 5 years N = 63 %	SLT working with children 5 - 11 years N = 79 %	SLT working across both age groups N = 23 %
Group	4.8	8.9	13.1
Individual	34.9	55.7	30.4
Mixture	60.3	35.4	56.5
	100.0	100.0	100.0

A child with a communication problem was rarely seen only in a group. The value of Chi-square obtained, $\chi^2 = 11.170$ when $df = 4$, is significant at the 0.05 level of probability.

There appears to be an association between the age of the children the therapist is seeing and the therapy regime being offered.

5.10.10 VENUE FOR SPEECH AND LANGUAGE THERAPY

Whatever type of therapy regime the child was offered, the therapists were asked to indicate where they saw the child.

Table 13. Therapy venue

Venue Total N = 165	SLT working with children under 5 years N = 63 %	SLT working with children 5 - 11 years N = 79 %	SLT working across both age groups N = 23 %
classroom	55.6	19.0	39.1
separate room	44.4	81.0	60.9
	100.0	100.0	100.0

Therapists in all three groups saw children most frequently in a room other than the classroom. After all the other rooms except the classroom were grouped together under the term 'separate room', the most common venue for speech and language therapy in a school is anywhere but a classroom. This response is significant at the 0.001 level of probability, Chi = 20.535, df = 2.

SUMMARY OF FINDINGS FROM CLINIC BASED THERAPISTS

The information collected from the clinic based therapists indicated that only two-thirds of them made routine contact

with the nursery or school of a child with a communication problem. Only a very small number of respondents would contact the the school if a child failed to attend an appointment.

The clinic based therapists were able to see the appropriate class teacher when they visited a school with nearly 70% of the respondents fitting into the teacher's timetable on a school visit.

The therapists talked to the teacher in the classroom surprisingly often with the children present. Although on the whole an alternative room was found for such discussions. On average the discussion time on an initial visit lasted in the region of 10 to 60 minutes and up to 30 minutes on subsequent visits. It was a little worrying to see how many therapists spent as little as 10 minutes in discussion. However 71% of the respondents stated that they did have sufficient time for discussion.

A larger number of therapists than expected indicated that they had worked closely with a teacher, usually the child's class teacher. When the way in which the therapist had worked with the teacher was analysed there was a definite pattern to the process. The majority of the assessments were done by the therapist. There was some joint planning between the teacher and therapist but the intervention strategies

were where most of the cooperation occurred between teacher and speech and language therapist. This may be because the clinic based therapist hoped the teacher would continue the therapy work when the child was in school.

The majority of the therapy was offered in a mixture of individual and group therapy. The therapists working only with the children who were 5 to 11 years of age saw more children on an individual basis than any other regime. It was usually done in a separate room although those therapists working with the under 5s saw the classroom as a close second choice.

This completes the summary of the clinic based therapists responses. In the next section the findings from the school based therapists are described.

5.11 RESPONSES FROM SCHOOL BASED SPEECH AND LANGUAGE THERAPISTS TO CLOSED QUESTIONS IN THE QUESTIONNAIRE

Every school is different and so is the environment for every school based therapist. A therapist in a language unit for 8 children with 2 teachers as colleagues, experiences different demands and expectations from the therapist in a large school with 20 or more teachers. Although there may be more similarities among therapists working in schools than between school and clinic based therapists.

The following tables and comments demonstrate the current working practices of school based therapists.

5.11.1 STRUCTURE OF THE UNIT OR SCHOOL WHERE THE THERAPIST WORKS.

To get an idea of the number of children each therapist may be responsible for or the potential number of children, the speech and language therapists were asked how many children attended the unit or school where they worked.

The responses indicated that 27% of the 208 respondents were working in settings with less than 16 pupils in their centre. This could be interpreted as an indication that these therapists were working in units. The majority of respondents, 73% appeared to be in a school setting.

5.11.2 Numbers of therapists

It is unusual even in a large school to have more than one speech and language therapist working there. In this sample 70 % (145) therapists were working on their own in either a unit or a school. There were 25% (53) of the respondents where they were working with another therapist in the school and 5% (10) where the respondent was one of were 3 therapists in the unit or school.

One might speculate as to how an appropriate speech and language therapy service can be provided in a large school with so few therapists. One way could be to try to establish good relationships between teachers and therapists by assigning therapists to individual classes. Then a partnership could be developed in one classroom setting. However, in this survey only 32% (66) of the therapists out of the 208 school based speech and language therapists were assigned to specific classes or groups.

So, the majority of therapists were not assigned to a particular classroom. This may enable them to establish their own timetables and build up links with teachers with whom they wished to collaborate. Although this could mean that an inexperienced therapist could be 'spread very thin' over several classes, with little time to talk to class teachers.

5.11.3 Numbers of teachers

Only 39% of 208 therapists worked with four teachers or less. The other 61% of the respondents appeared to have potentially a large number of staff with whom to make contact and work. This would link with the information that

73% of the respondents indicated that they worked in situations with more than 16 pupils.

5.11.4 REASONS THERAPIST AND TEACHER CONTACT EACH OTHER

In the next section therapists were asked about their practice in working with teachers. They were asked to think about a child they began to see 3-4 months earlier and respond to the next set of questions with that child in mind.

In the first question the respondents could choose from a selection of reasons for contacting a teacher. These included gathering information, explaining the child's communication problem or their therapy and seeking the teacher's involvement or support. An initial look at the data revealed little difference between the therapists working with the different age groups. It was interesting to note that there was no significant difference between the reasons which the therapists gave as their perception of why the teachers contacted them. This was regardless of the age of the child with whom they worked.

5.11.5 DISCUSSION TIME AND VENUE FOR DISCUSSION

If contact between a class teacher and a therapist is valued by the school management, it may be marked by time being allocated within the school day for discussion. Information was sought from respondents about this practice. Only 25% (51) of the therapists had therapist-teacher discussions timetabled. One must assume from the other 75% that this discussion is expected to take place in therapists' and teachers' non-teaching time.

The pattern of responses indicated that meetings were most popular at break, lunch times and after school. It was rare for discussions to occur before school.

The respondents could indicate a range of venues where the discussions took place. Although the classroom with and without children present appeared to be the most frequently chosen venue this finding was not significant when analysed statistically.

Therapists were asked how long they spent in discussion with the class teacher. The responses are given in the following table. The responses are shown as percentages of the total number of responses (N) to each question. The frequencies of the therapists responses were used when carrying out a statistical analysis.

Table 14. Time spent in discussion with class teacher

Time Total N = 208	SLT working with under 5s N = 64 %	SLT working with 5-11 yrs N = 107 %	SLT working across ages N = 37 %
0 - 10 mins.	28.1	32.7	29.7
10- 30 mins.	57.8	51.4	62.2
30- 60 mins.	14.1	15.9	8.1
	100.0	100.0	100.0

The percentages in table 14 seem to indicate that the most frequently used time for discussion time was between 10 - 30 minutes. When a statistical analysis was carried out it revealed that there is no association between the three groups of therapists and the time period used for discussion.

The percentages do need to be looked at in the light of when and where discussions took place. At break time in a school, there is very little time for more than a fifteen minute discussion period. This would fall into the 10-30 minute time period.

Therapists were then asked to indicate if they felt that this was sufficient time for discussion. There were 53% of the therapists who felt that they had enough time for discussion but 47% felt that there was insufficient time.

At this stage in the questionnaire a filter question was used to allow those school based therapists who had not worked closely with a teacher to move on to the open questions.

5.11.6 SCHOOL BASED THERAPISTS WHO HAVE WORKED CLOSELY WITH TEACHERS

School based therapists were asked to indicate how many of them had worked closely with a teacher.

Table 15. School based speech and language therapists who have worked closely with a teacher

SLT who Worked with a teacher N = 208	Percent
YES	92.0
NO	8.0
Total	100.0

The majority of therapists who were school based had worked closely with teachers. Only 8% (17) of the respondents had not worked in this way.

5.11.7 RATIONALE FOR THERAPIST CHOOSING A TEACHER TO WORK WITH

Therapists were asked why they chose to work with certain teachers. Only the 191 speech and language therapists who had worked with a teacher are referred to in the following section.

An initial look at the responses from the therapists indicating their rationale for choosing a teacher with whom to work seemed to favour the class teacher. However, a statistical analysis revealed that there was no association between the choices made by the therapists regardless of the age of the children they worked with.

5.11.8 WAY IN WHICH THERAPISTS AND TEACHERS WORK TOGETHER

When seeing a child with a communication problem, therapists were asked to state how they worked with the teacher. They were asked to respond to specific questions about the way the work was divided between them.

Table 16. The professionals who assess the child's speech and language problem

Professional Total N = 191	SLT working with under 5s N = 59 %	SLT working with 5-11 yrs N = 102 %	SLT working across ages N = 30 %
SLT	59.3	70.6	60.0
Joint	40.7	29.4	40.0
	100.0	100.0	100.0

It looks as though the speech and language therapist, whatever the age of the child, was most likely to carry out the assessment. However, using a Chi-square test this was not significant at 0.05 level when the value of Chi = 2.565, df = 2. Thus, there is no association between the professional who assesses the child and the age group with whom the therapist is working.

There was no indication by any of the respondents that an individual teacher may be the professional who assesses a child's speech and language problem.

Table 17. The professionals who plan the therapy

Professional Total N = 191	SLT working with under 5s N = 59 %	SLT working with 5-11 yrs N = 102 %	SLT working across ages N = 30 %
SLT	42.4	57.8	56.7
Joint	57.6	42.2	43.3
	100.0	100.0	100.0

There is an indication here of joint planning. It appeared more common for the teachers and therapists to plan together for children under 5 years of age than for the therapist to do it alone. However, there was no association between the age of the children with whom the therapist works and the professionals who plan the therapy when a Chi-square test was carried out. It was not significant at 0.05 level of probability, $\chi^2 = 3.795$, $df = 2$.

Table 18. The professionals who carry out the intervention procedure

Professional Total N = 191	SLT working with under 5s N = 59 %	SLT working with 5-11 yrs N = 102 %	SLT working across ages N = 30 %
SLT	30.5	29.4	30.0
Teacher	17.0	11.8	13.3
Joint	52.5	58.8	56.7
	100.0	100.0	100.0

The most frequent response was that speech therapists and teachers carried out the therapy together. However, there was no significant association between the professionals involved in the intervention and the age of the children being seen. Respondents could indicate by using the 'Other' category, that the people involved in carrying out the intervention procedures included welfare assistants or nursery nurses. However, other professionals were rarely mentioned.

5.11.9 THERAPY REGIME OFFERED TO CHILD

Therapists were asked to indicate whether the child was seen individually or in a group. They were also asked to indicate where the child was seen.

Table 19. Therapy regime offered to a child

Regime Total N = 191	SLT working with under 5s N = 59 %	SLT working with 5-11 yrs N = 102 %	SLT working across ages N = 30 %
Group	6.8	5.9	10.0
Individual	30.5	29.4	10.0
Mixture	62.7	64.7	80.0
	100.0	100.0	100.0

A group setting alone was rarely used as a therapy regime. Individual therapy was reasonably popular but, across all age groups, the most frequent response was a mixture of group and individual. Although this was not significant at 0.05 level, $\chi^2 = 5.311$, $df = 4$.

The next table provides an indication of where these individual and group sessions were carried out.

5.11.10 THERAPY VENUE

The classroom was single venue referred to most often by all respondents. If all the figures which indicated that therapy occurred in a room other than the classroom are added together, the most common venue in a school is anywhere other than a classroom.

However, this response was not significant at 0.05 level, $\chi^2 = 2.002$, $df = 2$. This indicates that there is no association between the age of the children being seen and the choice of venue.

Table 20. Therapy Venue

Venue Total N = 191	SLT working with under 5s N = 59 %	SLT working with 5-11 yrs N = 102 %	SLT working across ages N = 30 %
classroom	33.9	37.3	23.3
separate room	66.1	62.7	76.7
	100.0	100.0	100.0

SUMMARY OF THE FINDINGS FROM THE SCHOOL BASED THERAPISTS

The majority of the respondents appeared to be working in school environments rather than a unit. They have many more potential clients and more teachers with whom to liaise.

Only a very small number of respondents had any timetabled discussion time with a teacher. The most popular time was between 10 - 30 minutes with the respondents fairly evenly split about whether this was sufficient time or not.

The majority of the school based therapists had worked closely with a teacher, who was usually the child's class teacher.

The pattern of working with a teacher was distinctive. Although speech and language therapists who were school based did appear to carry out joint assessment and planning with the teacher, overall there was more joint intervention than joint planning or assessment.

Therapy was offered most frequently in a mixture of individual and group therapy. It was surprising that despite the fact that the therapists were school based, children were often seen outside the classroom.

5.12 THE RESPONSES TO THE OPEN QUESTIONS FROM BOTH THE CLINIC AND SCHOOL BASED THERAPISTS

In the earlier parts of this chapter it became apparent that the therapists' base influenced the way they worked with a teacher. More school based therapists work closely with teachers than clinic based therapists. Out of 208 school based respondents 92% indicated that they had worked closely with at least one teacher. Only 70% of the 235 clinic based therapists stated that they had worked closely with a teacher.

Collaboration only occurred on certain tasks. It did not happen when a child needed to be assessed. Regardless of their base both groups of therapists rarely carried out any joint assessment with teachers. The assessment of a child with a communication problem was usually done by a speech and language therapist.

After the therapist had carried out the assessment, the amount of collaboration increased. Half of the school based therapists planned the child's intervention with the teacher, whereas only a third of the clinic based therapists did any planning with the teacher. It was during intervention procedures that collaboration between teachers and therapists was most common.

This pattern of responses suggests that therapists do not see collaboration as a desirable activity. There may be factors which inhibit the process of working together. These issues were explored by the use of open questions at the end of the questionnaire. All the speech and language therapists, whether they were school or clinic based were asked identical open questions. Their replies were coded using categories which were developed from the data. The development of these categories is described in the following section. The chapter ends with a presentation and comparison of the clinic and school based therapists' replies to the open questions.

Open questions

The aim of the open questions was to give respondents the opportunity to express their own views and feelings about their perception of teachers' skills and knowledge as well as their own. They could state whether they felt collaboration was important and if so, why, as well as listing the factors which influenced it.

The responses to these questions seemed to be candid. This may have been due to the organisation of the questions within the questionnaire which facilitated such replies. Or the wording of the questions themselves may have enabled therapists to respond in this apparently honest way.

Therapists even stated which questions they felt were unnecessary. This was the case when therapists were asked what skills and knowledge they had which would help children with communication problems. These three responses express some of the negative feelings about this question

'This question is ridiculous. Training & practise of speech therapy give us the skill & knowledge to work with these children '.

'The answer to this question could go on and on, as an overworked therapist I cannot go into details !'.

'Feel that this question is pointless ! I would have thought that the knowledge was obviously what I gained during my degree course and in subsequent day to day experience'.

5.12.1 THE OPEN QUESTIONS USED IN THE QUESTIONNAIRE

The open questions in the last section of the questionnaire were available for all respondents to answer, wherever they were based. This included those therapists who had said that they had not worked closely with a teacher. The questions gave all respondents an opportunity to state their views even if they had little or no experience of working collaboratively. The open questions which were asked were as follows :

What skills and knowledge do you feel teachers have when working with children who have communication problems ?

What skills and knowledge do you, as a speech therapist, have when working with children who have communication problems ?

What factors do you think contribute to successful collaboration between speech therapists and teachers ?

What factors do you think inhibit speech therapist - teacher collaboration ?

Is successful collaboration between speech therapists and teachers important ?

If you believe it is important, please state your reasons for this view.

If you believe it is not important, please state your reasons for this view.

If your relationship with teachers has changed over the period of time that you have been practising as a speech therapist, please state in what way it has changed ?

What do you think could be done to improve undergraduate training in the area of collaborative work ?

5.12.2 THE DEVELOPMENT OF THE CATEGORIES USED TO CODE THE OPEN QUESTIONS

In the next section the development of the categories will be described in detail before the results are presented.

It could be argued that this detail would be better placed within chapter 4, where the overall methodological issues are dealt with. However, the decision was made to include the detailed description in this chapter for the following reasons. The specific structure of the questionnaire and the question forms used are presented early on in this chapter. It would be inappropriate to give the specific questions in chapter 4, before the overall questionnaire had been presented. Also, there is a considerable amount of text between chapter 4 and this part of chapter 5, making it

difficult to retain the details of the development of the categories while reading the text. A final point is that it seems to be a logical progression to describe the development of the categories after looking at the results from the closed questions. Therefore the categories and the way they were developed are presented in the next section of this chapter.

The responses from the therapists were detailed and extensive. This information needed to be analysed and presented in a coherent framework. This was the point at which the influence of the work of Miles & Huberman (1987) was central to the analysis of the data as outlined in chapter 4.

Categories needed to be developed to code the responses in a way that would enable the data to be presented in a manageable format while capturing the breadth and depth of the respondents views.

Initially 100 questionnaires were selected from those which needed to be analysed; 50 were selected randomly from each group. These questionnaires were then used to develop a set of categories which could be used to code the other 343 questionnaires.

The responses from 50 clinic based and 50 school based therapists were typed onto a word processor, thus removing the personal aspect of the hand written form. The therapists comments were recorded below the appropriate open question.

The 100 responses to the question, 'If it (collaboration) is important please give your reasons for this view' can be seen in appendix 6A and 6B. The responses selected at random from the clinic based therapists are presented as appendix 6A and those from the school based one are presented as appendix 6B.

The categories developed after the responses to the open questions were read and re-read by the researcher. Any recurring points or comments were recorded, common responses or ideas were also noted. It became apparent that certain issues commonly arose in the responses to certain questions. These were recorded and used to develop categories.

The codes were a single word or short phrase which summarised an idea or meaning. These codes were recognisable words that the researcher could remember and use and explain to others while analysing the data.

5.12.3 SAME OR DIFFERENT CATEGORIES

On the whole each open question focused on a different aspect of collaboration and so aimed to elicit different responses from the therapists. This meant that categories specific to each question were developed. Thus each question had a unique set of categories. The one exception was when two questions sought information about the factors which inhibited or facilitated collaboration. Here it was possible to generate an identical set of categories to be used to analyse the responses to the two questions.

To try to achieve a level of consistency in the use of the codes by anyone looking at the data, a set of ground rules was written. These provided examples of responses from the raw data which would be coded with a specific label and then categorised in a certain way.

In the following section the open questions and final categories are listed.

5.12.4 CATEGORIES ARISING FROM THE OPEN QUESTIONS

WHY IS COLLABORATION BETWEEN SPEECH AND LANGUAGE THERAPISTS AND TEACHERS IMPORTANT ?

CATEGORIES

Same goals

Pool information

Job satisfaction/professional development

Effective outcome for the child

Parental satisfaction

WHAT SKILLS AND KNOWLEDGE DO TEACHERS HAVE WHEN WORKING WITH CHILDREN WHO HAVE COMMUNICATION PROBLEMS ?

CATEGORIES

General knowledge of child's development
Specific knowledge of child's performance
Specialist teaching skills
Reference point of child's peers

WHAT SKILLS AND KNOWLEDGE DO SPEECH AND LANGUAGE THERAPISTS HAVE WHEN WORKING WITH CHILDREN WHO HAVE COMMUNICATION PROBLEMS ?

CATEGORIES

Knowledge about communication problems
Knowledge about language development and structure
Assessment skills
Diagnostic skills
Counselling skills

WHAT FACTORS CONTRIBUTE TO SUCCESSFUL COLLABORATION / INHIBIT COLLABORATION BETWEEN SPEECH AND LANGUAGE THERAPISTS AND TEACHERS ?

CATEGORIES

Mutual goals
Time
Appreciation of other's knowledge
Regular contact
Perceived level of management support
Motivation to work together

HOW HAS YOUR RELATIONSHIP WITH TEACHERS CHANGED DURING THE TIME YOU HAVE BEEN PRACTISING AS A SPEECH AND LANGUAGE THERAPIST ?

CATEGORIES

Knowledge/appreciation of other professional
Changes in own attitude
More comfortable in school setting
Professional changes

WHAT COULD BE DONE TO IMPROVE UNDERGRADUATE TRAINING IN THE AREA OF COLLABORATIVE WORK ?

CATEGORIES

Increase awareness of teacher's skills
Joint course work
Observation of other professional
Clinical practice in education settings
Specific presentations
No comment because too long since qualified

These categories were generated after many hours of reading and considering the data. The ground rules which were developed for assigning the data to the categories are given in the following section. The ground rules should be seen as guidelines as to what to include as a member of a category.

5.12.5 GROUND RULES FOR THE ASSIGNMENT OF RAW DATA TO CATEGORIES

Q.1 WHAT SKILLS AND KNOWLEDGE DO YOU FEEL TEACHERS HAVE WHEN WORKING WITH CHILDREN WHO HAVE COMMUNICATION PROBLEMS ?

GENERAL KNOWLEDGE ABOUT A CHILD'S DEVELOPMENT

Data to be placed within this category should include references to the teacher's knowledge of a child's ability in general but not to specific areas of knowledge. So responses such as 'knowledge of normal development/ general information about child in different settings' would be included.

SPECIFIC KNOWLEDGE ABOUT A CHILD'S PERFORMANCE IN CERTAIN AREAS

This category covers references to a teacher having information about a child's performance in a specific area such as 'the child's play, functional communication/ reading development, phonic skills.'

SPECIALIST TEACHING SKILLS

This category is used when the teachers' abilities in classroom management such as 'dealing with group dynamics' are mentioned as well as the delivery of the curriculum 'ideas for developing and presenting material as games'.

A CONSTANT POINT OF REFERENCE PROVIDED BY CHILD'S PEER GROUP

Any reference to the teacher having a group of children where some comparison or measurement can be made between the target child and others in the group.

Q.2 WHAT SKILLS AND KNOWLEDGE DO YOU AS A SPEECH AND LANGUAGE THERAPIST HAVE WHEN WORKING WITH CHILDREN WHO HAVE COMMUNICATION PROBLEMS ?

KNOWLEDGE ABOUT COMMUNICATION PROBLEMS

Data placed in this category would include references to any type of communication problem either specific or general, such as 'a diagnosis between dyspraxia and dysarthria', 'advice on communication problems'.

KNOWLEDGE ABOUT LANGUAGE DEVELOPMENT AND STRUCTURE

Any knowledge about either or both language development and structure. But not anything about language problems.

ASSESSMENT SKILLS

Responses which either use the term 'assessment' in a general way or break it down into more detail such as verbal or non verbal. So comments such as 'Able to assess formally and informally/ look at pre-verbal development' can be incorporated into this category.

DIAGNOSTIC SKILLS

This refers to responses which either use the term 'diagnostic' or 'recognise' as in 'ability to recognise the children who are delayed in their communication abilities'.

COUNSELLING SKILLS

This category covers a range of abilities found within counselling. So responses which included references to 'listening/ explaining/ supporting' would be included.

Q.3 WHAT FACTORS DO YOU THINK CONTRIBUTE TO SUCCESSFUL COLLABORATION BETWEEN SPEECH AND LANGUAGE THERAPISTS AND TEACHERS ?

MUTUAL GOALS

This category includes any mention of common goals, aims or objectives. It also covers statements such as 'Both knowing what we want the child to achieve' which implies a shared target.

TIME

Any reference to 'time' for whatever reason, whether it is time for a stated purpose or a general mention of time.

APPRECIATION OF EACH OTHER'S PROFESSIONAL KNOWLEDGE

This category covers positive or appreciative statements about the knowledge which the other person has as a professional, such as 'Mutual respect/Recognition of each others skills'.

REGULAR CONTACT

Any reference to frequent or regular mutual events is included in this category such as 'frequent meetings/see each other daily'.

MOTIVATION/DESIRE TO WORK TOGETHER

Any statements which include phrases such as 'wants/willing/tries hard to' to indicate that people want to work together.

Q.4 WHAT FACTORS DO YOU THINK INHIBIT SPEECH AND LANGUAGE THERAPIST AND TEACHER COLLABORATION ?

These categories are the same as the ones used to code the answers to the previous question. The difference is that they will be used to code negative comments about these areas or indicate an absence, for example of mutual goals.

MUTUAL GOALS

Any references to a lack of common goals or mutual goals.

TIME

Reference to a lack, insufficient or limited time as well as problems in finding time to plan or talk together.

APPRECIATION OF EACH OTHER'S PROFESSIONAL KNOWLEDGE

This category covers statements about the lack of appreciation or acknowledgement of a person's abilities. Or even not understanding the other person's knowledge.

REGULAR CONTACT

Any reference to little or poor contact either unspecified or more specific such as, failing to keep appointments.

PERCEIVED LEVEL OF MANAGEMENT SUPPORT

This includes references to support being absent, or a lack of support is implied such as 'Head teachers attitude to 'outsiders'.

MOTIVATION/DESIRE TO WORK TOGETHER

Any data which includes references to people being uninterested or unwilling to work together. This may include a failure to see the benefits of combining forces.

Q.5 WHY IS COLLABORATION IMPORTANT ?

SAME GOALS

Any references to a joint/mutual aim or goal which is being followed. Sometimes mutual goals are not explicitly mentioned but concern is expressed for a child being confused by different goals.

POOL INFORMATION

A joining/pooling information from both parties. The benefit of such action may be referred to.

JOB SATISFACTION/PROFESSIONAL DEVELOPMENT

The data included in this category is about teachers and therapists learning from each other and so enabling professional development to occur. It is often linked to job satisfaction where work was more pleasurable or productive.

CONTINUATION

The teacher or school setting is referred to as an opportunity or even a necessity for the continuation of speech and language therapy. This can include the teacher being given specific instructions by the therapist about what to do with the child.

EFFECTIVE OUTCOME FOR THE CHILD

It is seen as the best and most effective way for the child to make progress, without collaboration the therapist will not be effective.

PARENTAL SATISFACTION

The includes references to parents feeling reassured or at least not confused by conflicting advice if the therapist and teacher collaborate.

Q.6 IN WHAT WAY HAS YOUR RELATIONSHIP WITH TEACHERS CHANGED OVER THE PERIOD OF TIME THAT YOU HAVE BEEN PRACTISING AS A SPEECH AND LANGUAGE THERAPIST ?

KNOWLEDGE / APPRECIATION OF OTHER PROFESSIONAL

The data in this category includes references to general appreciation of what teachers do or know, such as 'finding that they can provide invaluable insights into the whole child'. As well as a more realistic picture of how difficult the teacher's job already is.

CHANGES IN OWN ATTITUDE

This category refers to changes of a personal nature which the therapist has experienced such as 'increased confidence'.

MORE COMFORTABLE IN SCHOOL SETTING

The data coded in this way relates to the school as a setting. The respondent will indicate that they are more comfortable or at ease in school as opposed to an earlier, more negative feeling.

PROFESSIONAL CHANGES

This category covers changes the therapist may have made in the way they work. It is not a personal change but may have been imposed by the management structure outside a school as

well as changes the individual therapist has made in the way they deliver their service.

Q.7 WHAT DO YOU THINK COULD BE DONE TO IMPROVE UNDERGRADUATE TRAINING IN THE AREA OF COLLABORATIVE WORK ?

INCREASE STUDENT AWARENESS / KNOWLEDGE OF TEACHER'S SKILLS
Any references to increasing knowledge or awareness of the teacher's abilities. This may be expressed generally or refer specifically to classroom practice.

JOINT COURSE WORK
Any joint seminars, lectures / workshops / study days.

OBSERVATION OF OTHER PROFESSIONAL
Opportunities to observe either the teacher or therapist working with a teacher in school.

CLINICAL PRACTICE IN EDUCATIONAL SETTINGS
Any references to clinical or practical work in an educational environment.

SPECIFIC PRESENTATIONS ON AREAS OF INFORMATION
Talks or lectures while in college, from teachers and speech therapists who are working in schools.

NO COMMENT I DON'T KNOW WHAT IT IS LIKE AT PRESENT
The respondent specifically states that they can't comment because they do not know what happens now.

When the ground rules had been written they were used when assigning the data to the categories. Initially they were used when two coders were trying to reach an acceptable level of agreement as described below.

5.12.6 AGREEMENT BETWEEN CODERS

The categories which had been developed by the researcher were used by the researcher and another person to code one hundred questionnaires, roughly a quarter of the total

number of questionnaires which had been returned. Each person was provided with the responses typed out under each question and the ground rules about how to assign the data to specific categories. The two coders then met and taking each response in turn, stated how they had coded that particular response. The numbers of agreement and disagreements were noted and the percentage level of agreement was worked out using the formula given in chapter 4. This was to try and ensure consistency in the use of the categories and reduce any bias on the part of the researcher.

The levels of agreement are shown in appendix 7. The levels of agreement between coders on this first attempt at coding were in some cases, unacceptably low. This appeared to be due either to one or two categories being rather too broad or a lack of specificity with some of the ground rules. It became clear that in two questions an additional category was required to aid clarity.

These alterations were made after discussion between the researcher and second coder. The new categories are marked with an asterisks in appendix 7. A month after the first attempt at trying to establish acceptable levels of inter-coder agreement, the same data were recoded by the same two people using the slight changes described. The results are

shown in appendix 7. It was felt that this time acceptable level of agreement were achieved.

The findings from the open questions are given in the following pages using bar charts to illustrate the visual difference between the responses from the therapists who were based in clinics and those based in schools.

The order of presenting the results has been changed slightly from the order in which the questions were asked. This has been done to provide a coherent framework for the reader which relates to findings presented earlier in the chapter.

5.13 SPECIFIC DETAIL OF RESPONSES TO THE OPEN QUESTIONS

In the previous part of this chapter when the analysis of the closed questions was complete, it appeared that speech and language therapists might not value collaboration with teachers. This was because the therapists assessed and planned children's therapy mainly on their own. They worked with teachers during the intervention stage. The responses below provide a different picture. The categories used to code the data will be listed before the responses from the therapists are discussed. Each time a response was given and assigned to a particular category this was counted as a mention. If a respondent wrote several sentences in reply

to a question but they were all on the same theme then they were grouped under one category and noted as one mention. The number of mentions under each category were calculated as a percentage of the responses to that question. Thus making it possible to compare the responses from the clinic and school based therapists. The frequencies were used when testing for significance with the Chi-square test.

5.13.1 WHY COLLABORATION IS IMPORTANT

There were 443 speech and language therapists who responded to this questionnaire and they all stated that collaboration was important. This unanimous response may have been because the respondents saw this as the expected or acceptable response to this particular question.

However, 436 therapists answered the next question on the questionnaire form which asked why therapists believed collaboration was important. There were only 7 respondents who did not answer this question. The responses from both the clinic and the school based therapists to each open question will be presented at the same time.

The categories used to analyse the therapists responses to the question "Why is collaboration between speech and language therapists and teachers important ?" were :

CATEGORIES : Same goals
 Pool information
 Job satisfaction/professional development
 Effective outcome for the child
 Parental satisfaction
 Continuity

The therapists' reasons for supporting collaboration were varied. The response patterns can be seen in figure 13. The differences between the responses from the clinic and the school based therapists to this question are not significant at 0.05 level, $\chi^2 = 6.151$, $df = 5$.

Some reasons were given more often than others. One, which was given infrequently was parental satisfaction. This was not seen as an important reason for professional collaboration by the therapists. This could be because the questionnaire focuses on teachers and therapists. It did not focus on the involvement of parents as a specific area of concern.

'Same goals' was referred to a little more frequently than parental satisfaction but was not a common response. This limited reference to 'same goals' is interesting because the definitions of collaboration quoted in chapter three, assume that mutual or same goals exist when two people are working together. Information gathered in the earlier part of the questionnaire revealed that therapists do not carry out joint assessments and little joint planning occurs, so

possibly 'same goals' is not seen as a crucial reason for working together.

Effective outcome for a child was seen by both clinic and school based speech and language therapists as an important reason for collaborating with a teacher. The school based therapists mentioned it more frequently than any other reason for collaboration.

'Between you the child will benefit'.

'We cannot treat the child in isolation we are dealing with the whole child'.

The clinic based therapists however referred most often to the continuation of therapy as their reason why collaboration was important.

'A teacher spends the majority of their time with a child during his waking hours'.

'The teacher can help to reinforce things being learned in a session'.

This response was not unexpected from the clinic based therapists as they may only see the child in the clinic for a short period of time, possibly on a weekly basis. This type of intervention alone will not enable a child to make good progress. So the therapists are dependant on continued support from the child's class teacher.

The other two categories used when looking at the responses to this question were, pooling information and professional development. Pooling information was mentioned more often by the school based therapists, who may have more experience of the value of this type of work than those working in clinics. The value of collaboration as an aid to professional development received very similar responses from both groups of respondents.

'We both gain in experience and expertise'.

'I learn from our partnership'.

To investigate what influenced professional collaboration, respondents were asked to indicate what they felt contributed to or inhibited collaboration.

5.13.2 FACTORS WHICH CONTRIBUTE TO SUCCESSFUL COLLABORATION

CATEGORIES : Mutual goals
 Time
 Appreciation of other's knowledge
 Regular contact
 Perceived level of management support
 Motivation to work together

Regular contact, perceived level of management support and mutual goals were referred to less frequently than any other category by both groups. These did not appear to be the most important factors when considering what contributes to successful collaboration (figure 14). The differences

between the responses from the clinic and the school based therapists to this question are not significant at 0.05 level, $\chi^2 = 7.478$, $df = 5$.

Whereas having time to talk to and meet with colleagues was mentioned much more frequently :

'Time to discuss children, plan activities'.

'Both taking time to sit and discuss the child'.

-

Both groups indicated that motivation was an important factor in contributing to successful collaboration. This was ranked as the second most important factor.

The factor which turned out to be most frequently mentioned as contributing to successful collaboration was appreciation. It was referred to most frequently by both clinic and school based therapists.

'Recognition that we are both there to help the child'.

'Interest in each others roles'.

'Mutual respect for each others specific skills and awareness of the overlap'.

Figure 13: Why collaboration is important

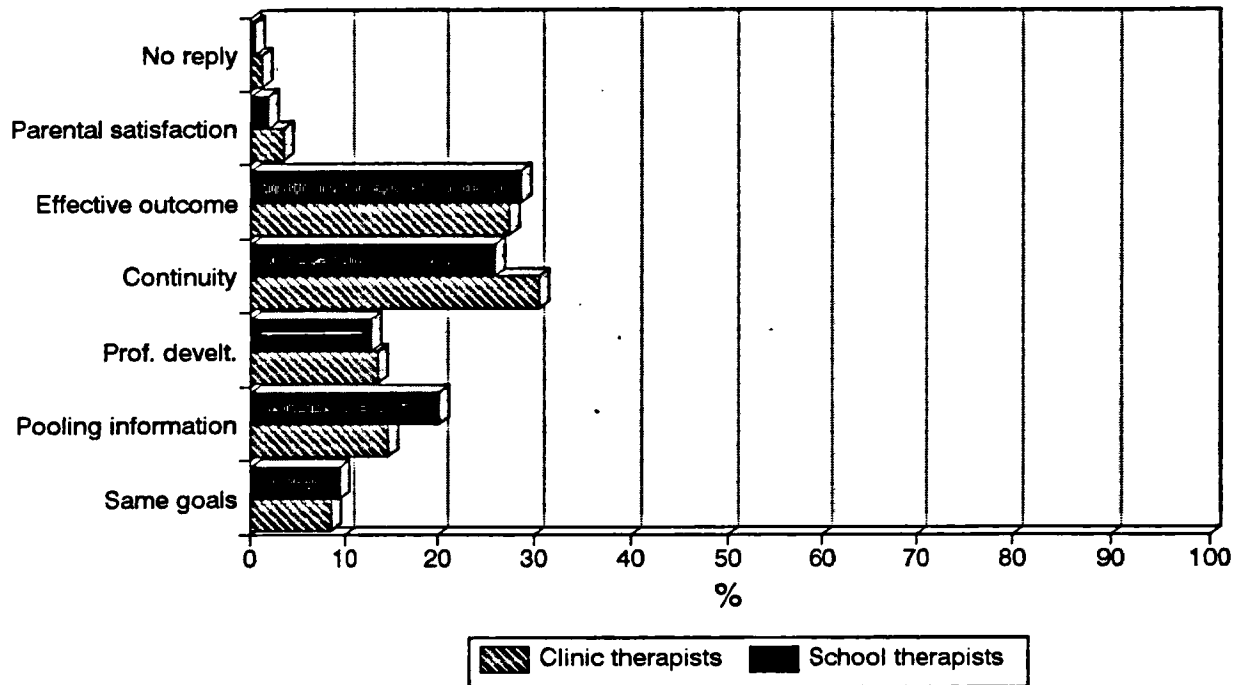
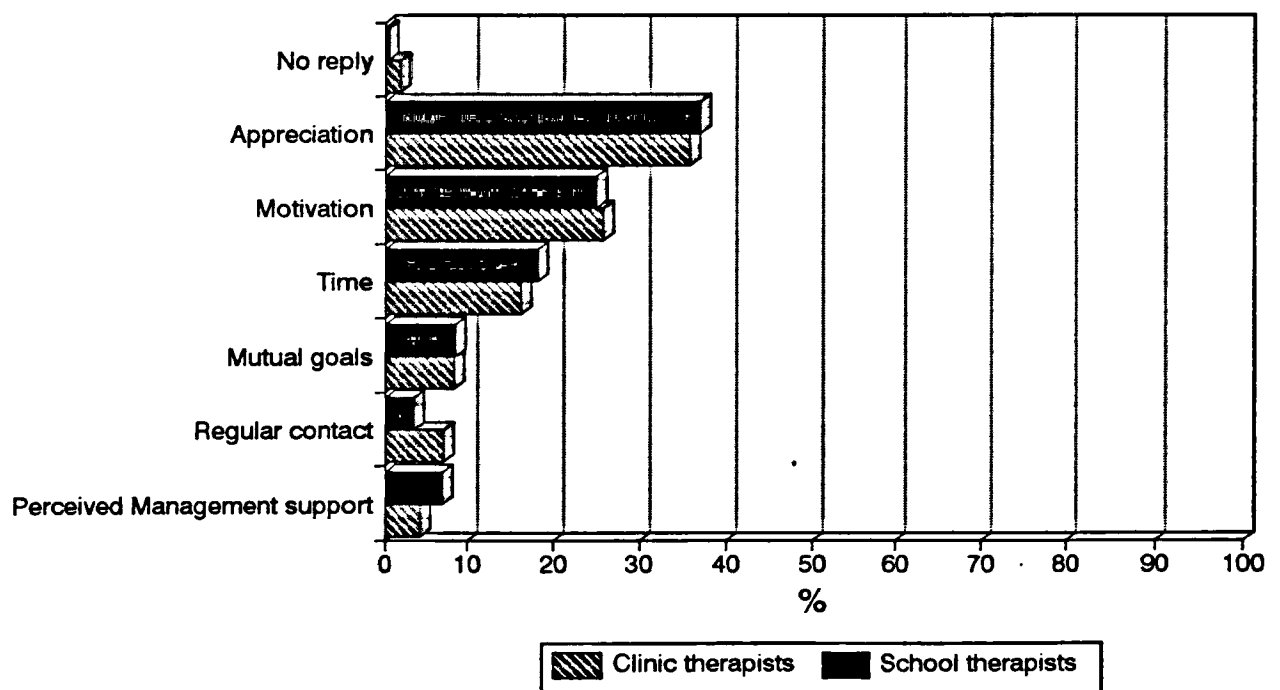


Figure 14: Factors which contribute to successful collaboration



5.13.3 FACTORS WHICH INHIBIT SUCCESSFUL COLLABORATION

CATEGORIES : Mutual goals
 Time
 Appreciation of other's knowledge
 Regular contact
 Perceived level of management support
 Motivation to work together

A lack of mutual goals and little regular contact between therapist and teacher were not given very often as factors which inhibit collaboration.

A perceived lack of management support also appeared not to be a serious impediment to collaboration. The therapists referred to the lack of motivation to work together more often than any lack of management support. The school based therapists referred to this more frequently than clinic based therapists. This would suggest that those who were based in schools saw a lack of motivation on the part of either professional as a greater stumbling block to collaboration than their clinic based colleagues. However, the responses from the clinic and the school based therapists to this question are not significant at the 0.05 level of probability, $\chi^2 = 8.229$, $df = 5$.

The two factors which both school and clinic based therapists referred to most often as inhibiting collaboration between teachers and speech therapists (Figure 15) were, a lack of time and little appreciation by the

other professionals involved.

'Lack of knowledge of the other's job'.

'Lack of understanding of what speech therapists can offer'.

'Ignorance of each other's ability'.

'Not having time scheduled in the timetable'.

Therapists were clearly signalling that they felt that not having sufficient time when attempting to collaborate was an inhibiting factor. Although 'time' was not referred to more frequently when successful collaboration was being considered. Clinic based therapists appeared to be even more conscious of a lack of time than the school based therapists.

It was a lack of appreciation which the school based therapists indicated that they felt was the most inhibiting factor when trying to collaborate with teachers. For the therapists to feel appreciated by another professional, the positive feelings have to be made explicit. It can be difficult to work closely with someone who does not show that they gain anything from the working relationship.

It is clear then that appreciation appears to be an important issue in professional collaboration whether as an inhibiting or facilitating factor. The school based therapists rate it as the most important factor in both of the above questions.

When speech and language therapists want to work with another professional, such as a teacher, they need to be aware of what they have to offer the other person. They also need to have a concept of what the other person can offer. The questions which were used to try to elicit the information and the replies given are described in the following section.

Fig. 15: Factors which inhibit successful collaboration

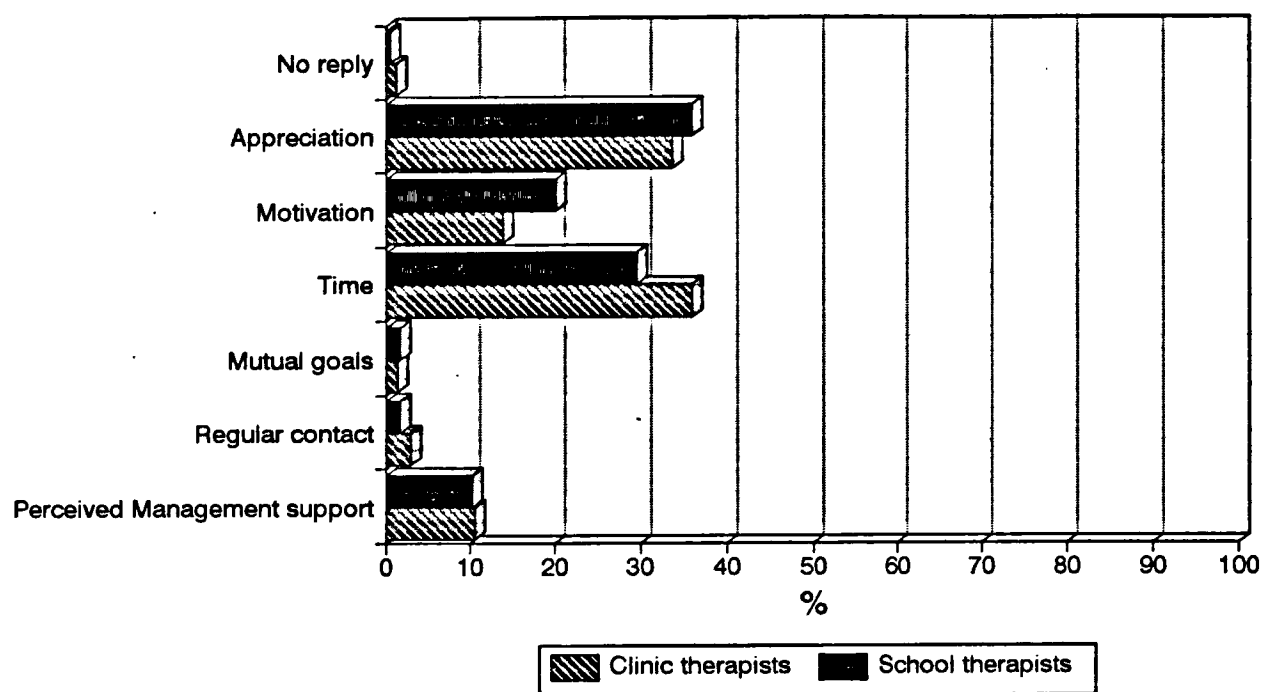
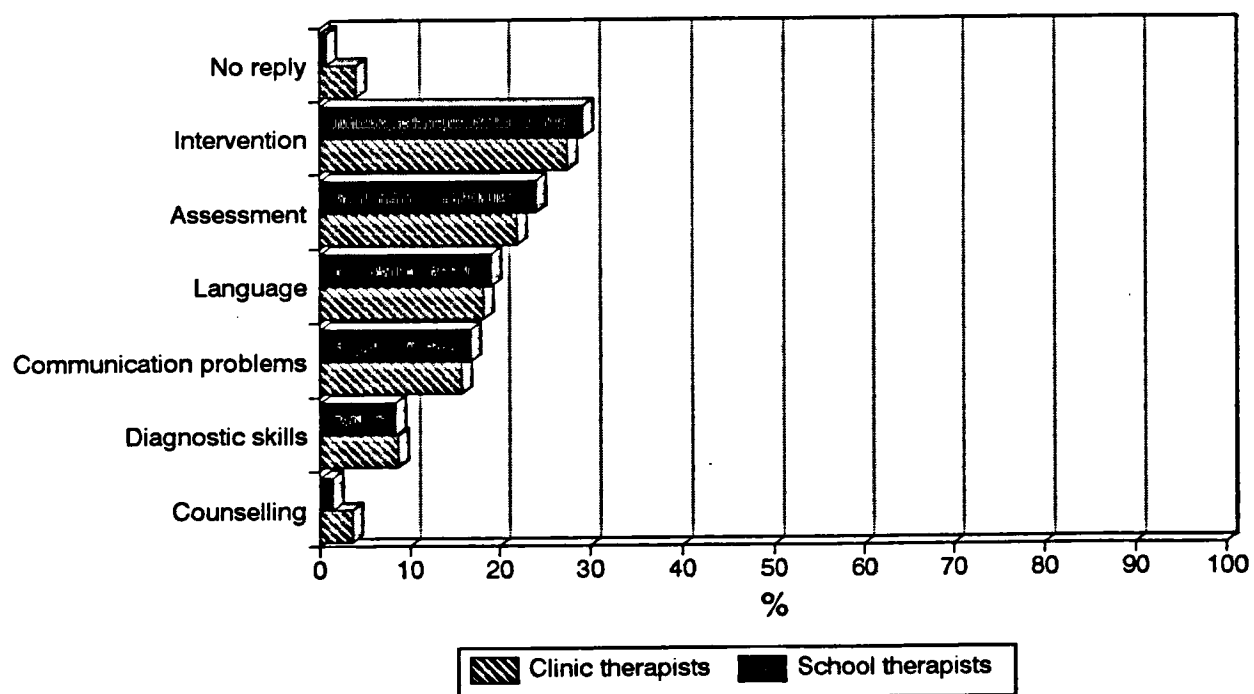


Figure 16: Knowledge SLT use when working with communication problems



**5.13.4 KNOWLEDGE AND SKILLS SPEECH AND LANGUAGE THERAPISTS
USE WHEN WORKING WITH CHILDREN WITH COMMUNICATION
PROBLEMS**

CATEGORIES : Knowledge about communication problems
Knowledge about language development and
structure
Assessment skills
Diagnostic skills
Counselling skills

From a professional view point it is encouraging to note that when responding to this question both clinic and school based therapists had very similar response patterns despite their different bases (Figure 16). Although, these responses were not significant at 0.05 level, $\chi^2 = 5.386$, $df = 5$.

Six categories were used to code the respondents' replies to this question. There were two areas which were referred to less frequently than the other four. These were counselling and diagnostic skills. The fact that therapists did not rate their skills in diagnosing communication problems more highly may be due to a move away from a medical role. It may also indicate a view which is more in keeping with the education view of working with the child's current strengths and needs.

Both sets of therapists rarely mentioned their counselling skills but this was particularly noticeable amongst those who were school based. It may be that a lack of contact with parents would cause the respondents to not be as aware of their counselling skills as their clinic based counterparts. Although counselling skills are constantly required in the pressures of a school environment.

The other four categories referred to in ascending order were - knowledge about communication problems, knowledge about language development and structure, assessment skills and the ability required to devise and carry out intervention strategies.

'Ability to assess and describe child's level of speech and language, noting areas of particular difficulty and hence producing a programme of work individually tailored for that child'.

The information therapists had which enabled them to plan and possibly carry out an intervention process was clearly valued by all the respondents and ranked as most important. The fact that the therapists valued planning and intervention is a very positive feature. If these professionals had rated assessment more highly one would have thought that they might be more comfortable in a consultative rather than collaborative role.

5.13.5 SKILLS AND KNOWLEDGE TEACHERS HAVE WHEN WORKING WITH CHILDREN WITH COMMUNICATION PROBLEMS

CATEGORIES : General knowledge of child's development
 Specific knowledge of child's performance
 Specialist teaching skills
 Reference point of child's peers

Although some therapists referred to the teacher being able to use the child's peer group as a comparison, it was not seen as particularly important by the majority of the respondents. When it was mentioned, it was by the clinic based therapists, who lack a reference group themselves and so see the teacher as being in an advantageous position. The differences between the responses from the clinic and the school based therapists to this question are significant at 0.01 level, $\chi^2 = 12.717$, $df = 3$.

Both school and clinic based therapists referred most often to the general knowledge that the teachers had about certain children in relation to their development, academic progress and family life. Frequently this was associated with comments about the teacher being with the child all day:

'They are with the children all day so ultimately they know the children better than we ever can.'

'She sees the child daily, in different situations'.

The specific teaching skills which the respondents mentioned

seemed to cluster around classroom management and group work. These are the areas that most therapists would feel that they are not trained in nor would they be expected to deal with them.

'Skills in dealing with groups rather than individuals'.

'More experience in delegating work to classroom assistants'.

'ability to deal successfully with group dynamics'

The teacher's specific knowledge about areas such as literacy and numeracy was also valued by the respondents. It is interesting to see (figure 17) that the therapists based in school referred to these areas more frequently than their clinic based colleagues. This may be because the school based therapists are in a position to be aware of such skills through their contact with teachers.

The value placed on professional collaboration may change with experience. As a professional becomes more confident in their own skills, they may find it easier to interact with other colleagues from different professional groups. To try to investigate this the respondents were asked to indicate how their relationship with teachers had changed over time, if in fact it had changed at all.

5.13.6 CHANGES IN THERAPISTS RELATIONSHIP WITH TEACHERS OVER TIME

CATEGORIES : Appreciation / knowledge of other
 professional
 Changes in own attitude
 More comfortable in school setting
 Professional changes

An initial glance at the bar chart (figure 18) indicated that there were fewer responses to this question than the previous ones. This view was supported by a further investigation of the non-respondents who stated that their relationship had not changed and therefore had nothing further to say on the topic. *However, the differences* are not significant at 0.05 level, $\chi^2 = 5.795$, $df = 3$.

Surprisingly there were 74 clinic based therapists who felt that no change had occurred in their relationship with teachers since they began work.

Out of the 74 indicating no change, 28 of them had also stated in the closed questions that they had never worked closely with a teacher. The other 46 respondents who felt that there had been no alteration in their relationship with teachers since they began work may have lacked experience in working in this way. So the lack of experience would reduce the chances of any changes occurring in their relationship with teachers.

Figure 17: Knowledge teachers use when working with communication problems

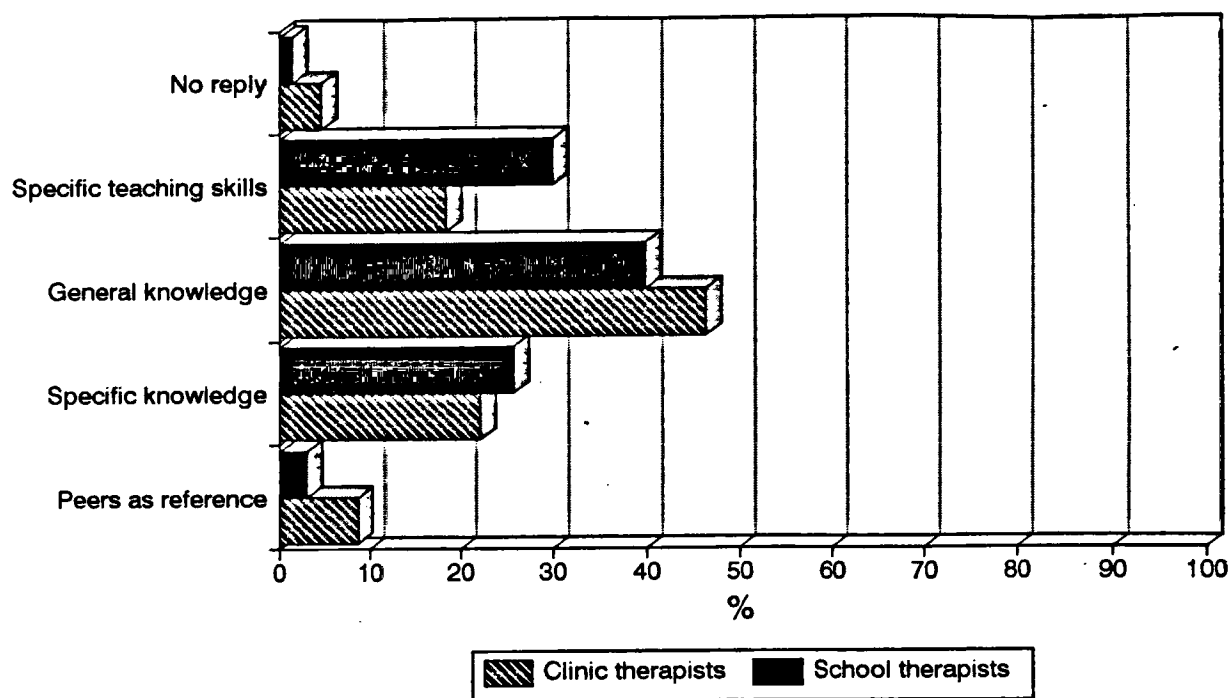
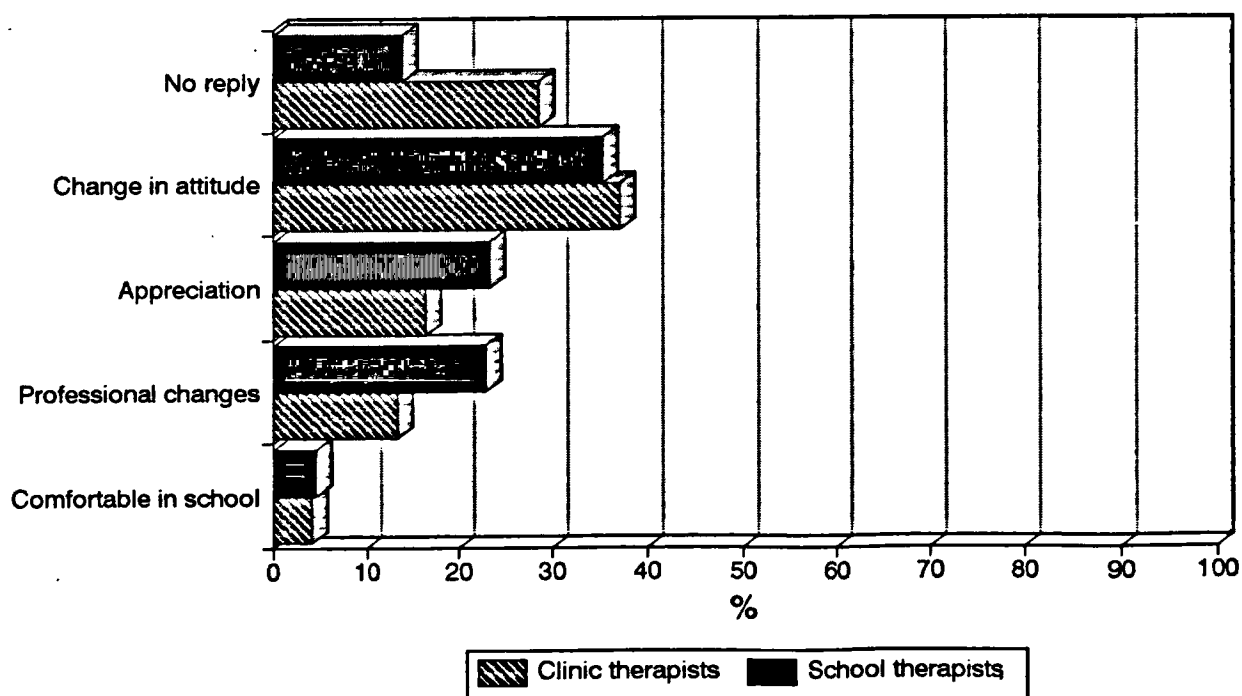


Figure 18: Changes in SLT relationship with teachers over time



In fact out of the 28 therapists who had never worked closely with a teacher 13 had been working for less than 30 months. The remaining 15 therapists out of the 28, who had not worked closely with a teacher all had 48 months or more experience, 8 of the 15 even had 14 to 37 years experience. There appear to be at least two possible reasons for therapists believing that their relationships with teachers had not changed over time. One is that they are too inexperienced to be aware of change and secondly they had not worked with a teacher for long enough for change to occur. The puzzling response is from the very experienced therapists who appear to have ignored the possibility of collaborating with a teacher. Their responses gave no indication of why this may be so.

In contrast only 36 school based respondents felt that there had been no change in their relationship with teachers during their working life. But only 5 out of 36 indicated that they had never worked closely with a teacher and these 5 therapists had less than 3 years experience. The responses from the other 31 respondents are puzzling. Without further evidence it is difficult to know if the lack of change over time was to do a successful relationship with a teacher which had been maintained without any changes. Alternatively the relationship may have been very poor and there has been no improvement.

The majority of therapists referred to a change in their own attitude which was felt to produce benefits. This was linked to increased personal/professional confidence so they felt more secure in what they could offer teachers.

'I have matured and no longer see teachers as authority figures'.

'I've stopped being frightened of teachers, (I'm 51) and can therefore mix more easily with them'.

'I have gained confidence and have been more honest with teachers in the work load I can cope with'.

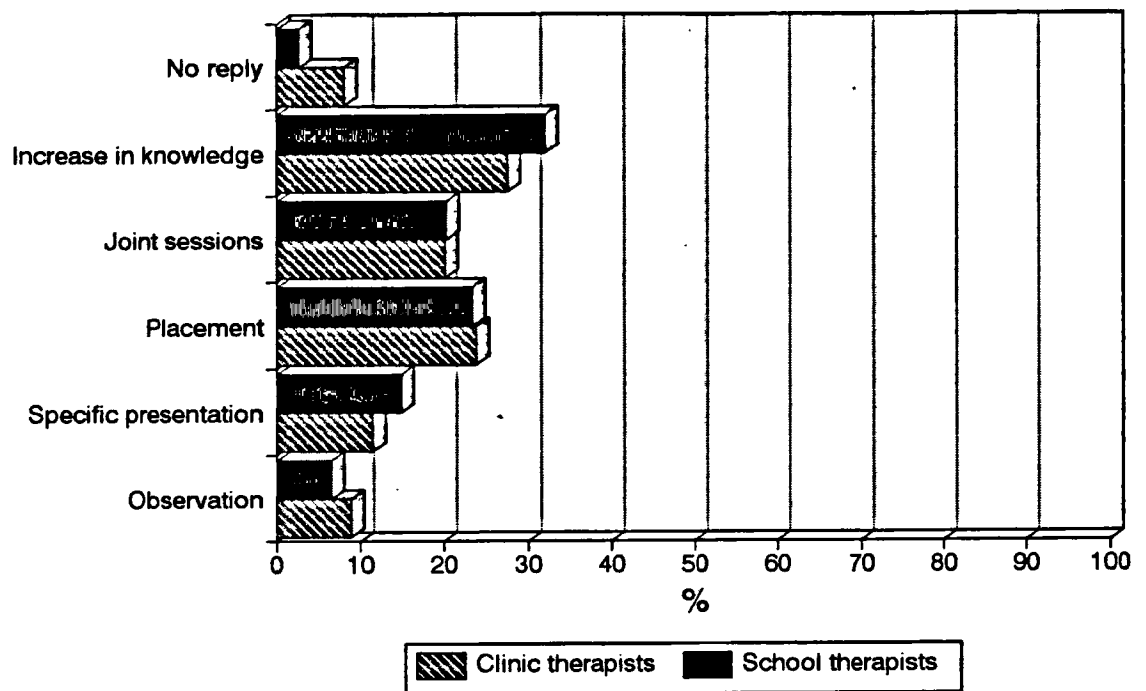
A small number of respondents from both groups felt more comfortable in school and believed that this had influenced their relationship with teachers.

The therapists in schools indicated that their increased knowledge of what the teacher had to offer, was just as important as the professional changes they had made in the way their service was delivered.

'I now go into classroom recognising teachers skills and how these can compliment mine.'

In the light of these responses one would expect therapists to have ideas about how to improve undergraduate training.

Fig. 19: Ways to improve undergraduate training in collaboration



5.13.7 HELPING UNDERGRADUATES LEARN TO COLLABORATE

CATEGORIES : Increase knowledge/awareness of teacher's skills
 Joint course work
 Observation of other professional
 Clinical practice in education settings
 Specific presentations
 No comment because too long since qualified

The two most popular suggestions from both groups of therapists were to increase the knowledge undergraduates had about what teachers can and do offer in the area of communication problems and to provide clinical placements in educational settings. The differences between the responses from the clinic and the school based therapists were not statistically significant.

'More input into undergraduate courses by teachers'

'Opportunities to work with teachers'

Joint teaching sessions with teachers were equally popular with clinic and school based respondents (figure 19). School based therapists mentioned specific presentations by practitioners more often than their clinic based colleagues.

'Joint sessions with student teachers'

'A talk from a speech therapist and a teacher
who are working well together'

Observation of collaborative work was the least popular method. However, to observe collaborative working practices a student will need to be on placement in a school. So

observation of collaboration, plus educational placements, cumulatively become the most important way of helping undergraduates.

SUMMARY OF FINDINGS FROM THE OPEN QUESTIONS

The responses to the open questions indicates that therapists believe that collaboration with teachers is important and beneficial for their clients. In spite of the fact that when they answered the closed questions it was noticeable that collaboration with a teacher was mainly occurring during the intervention procedures.

The most frequently mentioned factors which contribute to collaboration as seen by the respondents included motivation, being appreciated and appreciating the abilities of the other person. A lack of appreciation was also seen as an inhibiting factor, as was a lack of time. Although the issue of time was rarely mentioned when considering successful collaboration.

Therapists were clear about the skills which they were able to offer when working with children who had communication problems. It was interesting to note the fact that they valued planning and intervention above assessment and

diagnostic skills. The therapists' view of the teachers' abilities seemed more general, with the school based therapists appearing to have more awareness of the specific aspects of the teachers' classroom and subject knowledge.

The therapists had become more aware over time of what teachers could offer in their working relationship and this together with the increased confidence on the part of the therapist, had ensured a change in their relationship over a period of time. Although there were a considerable number of clinic based therapists for whom this had not happened due to a lack of opportunity.

Most respondents were able to make some suggestions as to how to improve undergraduate training in this area. There seemed to be a level of agreement about the need to experience collaboration while in training, as well as hearing from teachers about the training they received and classroom practice.

While looking at these responses, however candid one feels therapists have been in their answers, there are times when it would have been useful if the therapists' reply could have been investigated in greater detail. This is one of the drawbacks with using a questionnaire and highlights the value of the interview process used in the next chapter. The data collected in the following chapter also illustrates the

views of teachers involved in a collaborative partnership •
and explores in much more detail the possible reasons why
some teachers and therapists work together when seeing a
child with a communication problem.

CHAPTER 6

THE INTERVIEW : DESIGN AND RESULTS

INTRODUCTION

The information gained from the postal survey, described in the previous chapter, depicted the current practice of speech and language therapists when they contacted and worked with teachers. The information had been collected from therapists working in England and Wales. Up to this point in the research information had only been gathered from speech and language therapists.

In this chapter the emphasis is on the use of two theories, Social Exchange Theory and Contact Hypothesis, which were outlined in chapter 4, and may aid our understanding of collaboration between speech and language therapists and teachers. The theories were used to design the interview schedule. Responses were collected from both therapists and teachers. The general issues about interview procedures were dealt with in chapter 4. The specific detail of how the interview was designed will be provided in this chapter, followed by the findings.

The findings are presented and discussed in two ways. Firstly, with reference to each theory, followed by a

discussion of the implications of the findings for the two professionals who are working together.

The design of the interview schedule was influenced as stated earlier by both Social Exchange Theory and Contact Hypothesis. These theoretical frameworks were selected for their potential value in looking at professional interpersonal interactions and as a way of exploring some of the results from the questionnaire. For each theory it is possible to make predictions about the findings from the next stage of the research.

Predictions using Social Exchange Theory

In the last chapter there were factors which therapists felt facilitated collaboration which were not dependent on contact. There were some categories such as 'job satisfaction, professional development and appreciation' which could be described as a benefit or gain from working together. Using Social Exchange Theory it is possible to explore further whether professional and personal interactions brought about by working together do produce benefits.

One would predict that there are clearly identifiable benefits from working together but in any model where there

are advantages or benefits there must also be disadvantages or costs.

Under the terms of Social Exchange Theory one would also expect that the more people work together the less they value the benefits and so the relationship falters.

Another prediction would be that unless both partners feel that they are gaining or receiving benefits from the relationship then the working relationship will cease. So one is looking for evidence of mutual benefits from the interaction.

Predictions using Contact Hypothesis

The results from the questionnaire supported the view that contact between speech and language therapists and teachers had an impact on the amount of collaboration which occurred. Therapists who have worked with teachers appear to value their colleagues skills and knowledge and see them as different from their own. Contact Hypothesis makes it possible to pursue the impact of contact on the way teachers and therapists work together.

One prediction would be that pairs of therapists and teachers based in the same unit or school would feel more positively towards each other than those pairs who had

different bases. Pairs of professionals using the same base should have a greater understanding and knowledge of the similarities and differences between them.

One would expect the professionals who work together without conflict to have been working together for a prolonged period of time.

It would seem reasonable to expect that the therapists and teachers who do not have the same bases would not appear as positive about each other. They will probably have less knowledge and understanding of the other person.

Following these predictions the amount of agreement or disagreement there was with the theories was considered when the analysis of the interview transcripts was carried out.

6.1 CHOICE OF SUBJECTS

Therapists and teachers who were working together were selected as the interviewees, the 'willing collaborators'. The 5 teachers and 5 therapists who were working from the same unit or school as their collaborating partner were identified by the unit/school being selected at random from a list of special educational needs provision within

accessible areas. The 5 therapists and 5 teachers who were not based at the same place as their partner were contacted through the Speech and Language Therapy Managers and Special Needs Advisory teachers. At least 4 health authority districts in the London area stated that therapists who were clinic based did not visit schools.

Subjects

Twenty pairs of speech and language therapists and teachers were interviewed they all worked in London, Essex, Sussex and Hertfordshire. The geographical limitation of these inner city and rural areas was due to the fact that they needed to be accessible to a single interviewer. There were no indications of non-representativeness apart from the fact that a criterion sample of 'willing collaborators' was chosen.

A full list of the interviewees can be seen in Appendix 9, but a summary is provided in table 35 below. Each pair was known by the number they were given, this was to preserve anonymity.

PAIR	MONTHS WORKED TOGETHER	BASE
1	13	Language Unit
2	120	SLD School
3	36	Language Unit
4	36	Language Unit
5	24	Language Unit
6	72	Language Unit
7	11	Language Unit
8	11	Clinic/Infant School
9	15	Language Unit
10	18	Clinic/Language Unit
11	8	Clinic/MLD School
12	3	Clinic/Junior School
13	36	Hospital/Nursery
14	36	Clinic/ Nursery
15	3	Clinic/Junior School
16	3	Clinic/Infant School
17	3	Clinic/Junior School
18	3	CLinic/Infant School
19	15	Language Unit
20	3	Physically H. School

Table 21. Pairs of Interviewees identified by a number, length of time they had worked together and their base

6.2 THE INTERVIEW

The interview schedule was devised incorporating questions driven by the Contact Hypothesis and Social Exchange theory and can be seen as appendix 8.

The theoretical framework from each theory was analysed to identify the components parts. These components were used to devise the questions. In this manner the structure of the interview developed and alongside it the system of analysing the interview transcripts. The questions which were asked to

elicit the information to support or discount the theories, are given in the figure below.

COMPONENT OF THEORY	INTERVIEW QUESTIONS
SOCIAL EXCHANGE	
People engage in interactions which provide a profit/positive payoff. A person is rewarded by the benefits of an interaction.	What are the advantages of working in this way ? What are the disadvantages ? What are the personal benefits?
The greater the reward the more effort or energy the person will use in obtaining it.	Could you improve your working relationship ? What would you do if there were difficulties ? Why do you collaborate ?
The value of an activity will decrease with frequent use. The costs rise and the benefits decrease	Could you improve your working relationship ? How long have you worked together ?
Interactions will only continue if both parties are rewarded.	What are the advantages and disadvantages of working in this way ? Check reciprocity.
A commitment is made to an exchange.	Why do you collaborate ? What does the term collaboration mean to you ?
CONTACT HYPOTHESIS	
People favour their own group. They are prejudiced and hostile to people from other groups.	Would you rather be a teacher or a SLT working with a child who has a communication problem ? On what grounds would you make that choice ?
Contact between members of 2 different groups will produce positive attitudes between them	What are/would be the benefits of being in the same venue as the SLT/teacher ? What disadvantages ?

<p>Contact between people of different backgrounds will enable them to increase their knowledge and understanding of similarities as well as their differences.</p> <p>Conflict is reduced when a superordinate goal is introduced.</p> <p>Contact needs to be for a prolonged period.</p> <p>There should be official and institutional support.</p>	<p>What are the personal benefits of working with SLT/teacher ?</p> <p>If you did not work with them, what would you miss most ?</p> <p>What can you do to help the a child that the SLT/teacher cannot do ?</p> <p>What would you miss most if you did not work with them ?</p> <p>Why do you collaborate with SLT/teacher ?</p> <p>How long have you been working together ?</p> <p>Describe how the colloboration began.</p> <p>How would you deal with disagreements ?</p>
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Figure. 20 Components of Contact Hypothesis and Social Exchange Theory and the interview questions

6.2.1 THE PROCEDURE

The interview was conducted either in a school or clinic at a time convenient to the interviewee. Arrangements had been made by telephone. Permission had been obtained to tape record the interview. When the interview took place, brief hand written notes were also made on a pre-printed sheet. These were checked against the tape recordings and acted as an aide-memoire during the interview. All interviews took place either in a separate room or an empty classroom. The

interviews were transcribed within a week onto a word processor by the researcher.

All interviewees were assured of anonymity and were assigned a number and a letter, either A or B depending on whether they were a therapist or a teacher.

6.2.2 ANALYSIS OF THE DATA

The components of both Social Exchange and Contact Hypothesis which had been used when designing the interview schedule were utilised again to develop the categories shown in the following figure.

COMPONENT OF THEORY	CATEGORIES
SOCIAL EXCHANGE	
People engage in interactions which provide a profit/positive payoff. A person is rewarded by the benefits of an interaction.	Altruistic benefit e.g. for the children Personal benefit e.g. less stress Professional benefit e.g. new knowledge Cost e.g. stress, fatigue No benefits
The greater the reward the more effort or energy the person will use in obtaining it.	Altruistic benefit, on behalf of the children Personal benefit Effort
The value of an activity will decrease with frequent use. The costs rise and the benefits decrease.	Familiarity reduces value Value remains constant Familiarity increases value

Interactions will only continue if both parties are rewarded.	Mutual gain [reciprocity] Individual gain
A commitment is made to an exchange.	Altruistic - for child Professional
CONTACT HYPOTHESIS	
People favour their own group. They are prejudiced and hostile to people from other groups.	Benefits of own group Negative view of own group Negative view of other group
Contact between members of 2 different groups will produce positive attitudes between them.	Negative views about other person Positive views about other person
Contact between people of different backgrounds will enable them to increase their knowledge and understanding of similarities as well as their differences.	No increase in knowledge and understanding of similarities No increase in knowledge and understanding of differences Increase in knowledge and understanding of similarities Increase in knowledge and understanding of differences
Conflict is reduced when a superordinate goal is introduced.	Same goals Pool information Job satisfaction / professional development Effective outcome for the child Parental satisfaction
Contact needs to be for a prolonged period.	Period of time recorded in months
There should be official and institutional support.	No Management support Management support

Figure 21. Components of Social Exchange Theory and Contact Hypothesis and the categories derived from them.

6.2.3 INTER CODER RELIABILITY

After the above categories had been developed, the findings were plotted for each theory on a large sheet of paper. The categories were listed along the top and the interviewees, identified by letter and number, down the left hand side. Where an interviewee had made a statement or comment which could be assigned to a category a tick was placed in the appropriate box. If several comments were made in the same interview which could be categorised in the same way, that was recorded.

It was important to establish that the assignment of interview statements was above a chance level and so there was an acceptable level of agreement between the two coders. This was to reduce the subjectivity of the researcher. From the group where both the teacher and therapist had the same base a random selection of 4 pairs of transcripts, that is 8 interviews out of a possible 20, were selected. The same procedure was carried out with the group where the therapist had a different base from the teacher. So 16 interviews were used to establish a level of agreement between the two coders. This meant 40% of the transcripts were used to establish intercoder reliability. The second coder was selected because she was not a teacher or a speech and language therapist.

The categories for each theoretical framework were used as given in the table above and then the agreement levels between the two coders were plotted on the same matrix using different coloured pens. The Kappa statistic (Siegel & Castellan 1988) was used to look at the agreement reached between the two coders when assigning data to various categories. Complete agreement between coders would produce $K = 1$; if agreement is at chance level then $K = 0$.

The level of agreement between the coders when using the categories developed for Social Exchange Theory produced $K = 0.84$. When the coders were using the categories developed from Contact Hypothesis the level of agreement was $K = 0.38$. Thus for the Social Exchange Theory categories there was a high rate of agreement between the coders whereas there was a moderate level of agreement when the Contact Hypothesis categories were used. As both levels were above the chance level of agreement it was felt that the categories could be used to analyse the rest of the interviews.

The findings from analysing the interview data are described in the following pages and examples from the interviews are provided in the text in order to illustrate certain points and provide the reader with an indication of the type of answers which were given.

6.3 THE FINDINGS FROM THE INTERVIEW DATA

Ways of Collaborating

An initial question at the start of the interview was one designed to enable the interviewee to shift their focus from what they had been doing prior to the start of the interview and to help them to begin to focus on the ways in which they collaborated with their colleague. They were asked to give examples of the ways in which they worked with the other person. This provided information which does not readily fit in under either the heading of Contact Hypothesis or Social Exchange Theory. However it is worth acknowledging that many practical examples of how therapists and teachers did collaborate were given. Some are quoted below to provide the reader with an insight into the kinds of activities which the interviewees were engaged in.

'We identify children at the beginning of term who need help and we decide who will work with them'.

'In the social skills groups, she leads or I lead and the other one makes notes on each child's contribution'.

'We do everything together, we have even toileted them together. I see it as a total partnership'.

'I work in the classroom using the topic for the term'.

'We meet every Wednesday and discuss the next week ..'

'There is a shared record sheet in the classroom which we both record our aims on'.

'Parents come in on a Thursday and we see them together'.

The findings from the interviews will be described under each theoretical framework in turn. As the interview was developed from the components of each theory, the findings will be described using each component as a sub-heading. When quotations from the professionals interviewed are included in the text the initial 'T' is used for teachers and the initials 'SLT' for speech and language therapists.

6.3.1 SOCIAL EXCHANGE THEORY

1. People engage in interactions which provide a profit or positive payoff. A person is rewarded by the benefits of an interaction.

The teachers and therapists who were interviewed were able to identify many different benefits from collaborating. These included benefits for the child they were working with, personal benefits such as a sharing of concerns, support and a reduction in stress as well as professional benefits such as new knowledge about specific areas.

'The benefits for the children are enormous. The benefits for them and their functional communication skills have been amazing'. (T)

'The child gets therapy in a functional environment'. (T)

'It helps the child, they are not getting just one slot it's continued'. (SLT)

'It's pleasurable, interesting and rewarding'. (T)

'There is someone to share your concerns with'. (SLT)

'You can feel very isolated working with these children when we work together it is stimulating'. (T)

'Because I came out of mainstream school I felt I knew very little about the problems of these children, working in this way helped me'. (T)

'Her brains ! She knows a lot about something I want to know about'. (T)

'She's got a vast stock of knowledge I can tap into'. (SLT)

The people being interviewed also acknowledged that any activity which had advantages also involved disadvantages or costs. It became clear from reading the transcripts that collaboration between two professionals produce identifiable costs. This was expressed by 4 (20%) teachers and 8 (40%) therapists out of the 20 respondents in the same base group and 2 (10%) teachers and 8 (40%) speech therapists out of 20 respondents in the different base group.

It seemed that the therapists are more conscious or aware of a loss when they collaborate. When their comments were considered in more detail the following picture emerged. Four of the therapists said it was 'time consuming' and two described it as 'time wasting'. Other comments from individuals included, 'It is tiring, exhausting, it takes a lot out of you' and it is 'stressful'.

Therapists appeared to feel they were giving up some aspect of their professional role. This was expressed through

comments such as :

'You have to compromise'. (SLT)

'I am never the leader...because I am the visitor'.(SLT)

'You give up what you regard as your domain'. (SLT)

These suggest that one of the professional aspects that therapists enjoy is their autonomy. A couple of teachers used the phrase 'my speech therapist' indicating a closeness, even a possessiveness which has the potential to cause problems if the therapist is called away to another school or meeting. The therapists also noted that when collaborating :

'You get side tracked, you can't fit it all in'. (SLT)

'There is so much of the school day when you can't see someone'. (SLT)

'There is a lack of parental contact'. (SLT)

When therapists were based in the same school as the teacher it was usually a special school or a unit in a mainstream school. This meant that the therapists were working with a group of children who often had similar problems. The therapists found that they had become specialist and their specialisation was a double edged sword. They had become knowledgeable about a specific group of children and their communication problems and felt :

'pretty inadequate in the outside world of speech therapy'. (SLT)

'The biggest disadvantage is that the range of disorders I now treat is very narrow'. (SLT)

The costs of working together were also noted by the teachers. They reported that they felt that time and effort were required to work in a partnership.

'We work very hard at working together. Such close proximity puts a strain on you'. (T)

'It's another pull on your time'. (T)

'It is a constant juggling act to fit it all in'. (T)

Despite recognition of the time and effort it takes when working with another professional only 2 teachers out of 20 indicated a feeling of being professionally exposed when working in this way.

'You lay yourself open when you say I don't know what to do'. (T)

'I did feel threatened to start with. I didn't want to appear completely stupid.' (T)

The two people making these comments may have been able to do so because they were more confident now and could look back on a time when they had felt professionally vulnerable. It is possible that they may have felt this way whoever they were working with. Other teachers may also have felt this way but were not able to admit their feelings.

Others recognised that they were no longer in complete control of all that went on in the classroom. For example a

last minute change of plan could not happen without consulting the other person :

'You can't have a brilliant idea in bed at 10pm and come in and teach it at 9am'. (T)

There was a striking difference between the group where teacher and therapist had the same base and the one where the bases were different. This difference occurred over the knowledge that had been acquired from their professional partner. There were 14 (70%) out of 20 respondents who had the same base, who stated that they have 'learnt a lot' from the other person. The 14 people included 6 therapists and 8 teachers. This researcher uses the term 'cognitive gain' to describe the acquisition of knowledge referred to by the teachers and therapists.

'We are dealing with a professional who is able to impart knowledge to us in so many ways- by demonstration, describing something to us or we pick her brains'. (SLT)

'I have learnt a lot about nursery education from working with her'.(SLT)

'Chris has far more knowledge of language than I have it is her specialist subject, I learn things from her'.(T)

'When I work with Sonia I begin to understand the children's total needs'. (SLT)

It was noticeable that in the group where the therapist and teacher had different bases only 4 therapists and 2 teachers referred to a cognitive gain.

One explanation for this difference could be that the professionals who have the same base are more aware of what they learn from the other person. While those based in different centres do learn from each other but they are unaware of this process. Another possible explanation is that working in closer proximity does aid an exchange of knowledge and the people involved are conscious of gaining new knowledge.

2. The greater the reward the more effort or energy the person will use in obtaining it.

There was no way of clearly measuring if the teachers and therapists would have put even more effort into their attempts to collaborate if the reward had been greater. For many the fact that they worked in this way for the sake of the children, was a very important reason and a reward in itself.

If one considers the costs of collaborating as stated earlier as well as the following quotes it would appear that teachers and therapists are already putting considerable effort into their interaction.

'You have to be flexible and think on your feet because there is a second variable'. (SLT)

'From a timetabling point of view it is very difficult to fit everything in'. (T)

'I get a lot of flack from the other adults in the unit because it takes time to work together'. (T)

3. The value of an activity will decrease with frequent use.

The costs rise and the benefits decrease.

There was no evidence that teachers or speech and language therapists found that familiarity reduced the value of collaborating. This may have been because the people who were interviewed appeared to be successful in their collaboration and so it retained its value.

The interviewees gave a clear indication of the 'cost' when collaborating with another professional. Therefore one might have expected that they would find the effort too much and withdraw after a period of working together. So the speculation that the effort of overcoming the costs would diminish the value of the working relationship was not supported during these interviews.

It appeared that the majority of interviewees felt that the more they collaborated, the more they valued it. There were things they wanted to focus their joint attention on and specific areas they wanted to improve.

'I would like more quality time to talk with Dawn. I am aware, as I am with most of my dealings outside the classroom that I am on the run'. (T)

'There is always room for improvement. Certainly in the social skills area we need to do more work, we've been a bit tentative in tackling that'. (SLT)

'If we were given more time to be together, actually timetabled in for it, we could plan the children's work'.(T)

'I think we could work together on the speaking and listening reports, my report doesn't mean much to parents at present'.(SLT)

One possibility was that these positive views about the value of collaborating came from people who had only just begun to work together. In fact the length of time that teachers and therapists had been working together was compared to their response and it did not appear to influence their views on this issue.

4. Interactions will only continue if both parties are rewarded.

In all of the interviews there was explicit and implicit references to the ways in which people were benefiting from the interactions with another professional. The teachers and therapists appeared to be rewarded by these benefits. There was no evidence in the interview data that one or other of the partners was not gaining in some way from the partnership.

5. A commitment is made to an exchange.

The teachers and therapists who were interviewed appeared to have made a commitment to this professional exchange or interaction. Many people did this because they believed that it was the only way that the child or children they were concerned about would benefit.

'The end result for the child is so much better'.(T)

'The children need everyone around them doing the same thing'. (SLT)

'I collaborate for lots of reasons but the first one is, and should be for the benefit of the children'. (SLT)

'I don't believe a child's needs can be met in school just by the therapist working in isolation'. (T)

'The more professionals you can appropriately involve for the child the better. A child is not just what the educationalist sees'. (T)

Sometimes the commitment appeared to be made out of a desire for self preservation as in this therapist's response.

'It is usually easier to collaborate than not, usually for one's own self protection. I am here for half my working life so I'd be rather foolish not to try and be part of the unit'.(SLT)

The therapists and their partners who had a different base said they collaborated for the sake of the child. They mentioned this more often than the same base pairs. In fact, in the same base group of 20 interviewees, there were 7 people who do not make any reference to doing it for the child's sake. They seemed to collaborate out of pleasure or to increase their own knowledge.

Summary of findings related to Social Exchange Theory

There are two predictions from Social Exchange Theory which do not have any support from the data collected in these interviews. One is that the value of an activity will decrease with frequent use. There was no evidence to indicate that this was occurring in this sample, in fact the reverse seemed to be true. The other prediction was that the greater the reward, the more effort a person will put in to obtain it. Again there was no evidence to support this view and it may be that the questions asked were not sensitive enough to elicit this information.

The therapists and teachers who were interviewed continued to value their collaborative partnership and for most people, the benefits continued to rise rather than decrease over a period of time.

It was difficult to know how the reward could have been greater or if people could have put in more effort. Perhaps the latter issue raises points about the perceived amount of effort people make when doing their jobs.

There appeared to be an overall commitment to being involved in the interaction by the interviewees. One could argue that they were bound to be positively biased because they were willing to be interviewed. However during a 45 minute

few it is not possible to maintain a totally false image about their working partnership.

The prediction that there are clearly identifiable benefits from working together received support from both therapists and teachers. Initially the range of benefits seemed enormous but it was possible to summarise them under the headings - personal, professional, altruistic or sometimes all three.

A cognitive gain could be classified as all three. The intervention offered to a child may be improved by new knowledge and this could be seen as an altruistic benefit but it could also be a professional gain for the teacher or therapist. If someone is learning new information they may enjoy their job more or feel better about themselves and so the cognitive gain can be seen as a personal benefit.

The acquisition of new knowledge or cognitive gain was a surprise to the researcher. The frequency with which it was mentioned and the amount of reciprocity had not been predicted. The teachers and therapists commented explicitly on the new knowledge and information that they had learnt from their partners.

The comments made during the interviews were about both general and specific areas of knowledge.

'I have acquired an awful lot of knowledge from her'. (T)

'When I first came here I learnt a lot about language disorders from Claire'. (T)

'She has taught me how to manage groups'. (SLT)

'I know so much more about reading programmes now'. (SLT)

'It is the areas like memory which I don't know about which Helen explains to me'. (T)

The unexpected nature of this finding has relevance for the future collaborative patterns of these two professionals. It suggests that whether the people involved are conscious of it or not, collaboration can produce an important exchange of information. It is not clear whether cognitive gain is part of the process of collaborating or an end product.

Each pair seemed committed to their current professional interaction and there was no evidence from their responses to the interview questions that they did not want to continue the collaboration. It can only be assumed that they were both gaining from their work together and therefore wanted to continue this interaction.

Overall, it would appear that there is partial support for Social Exchange Theory. The teachers and therapists appeared to have made a commitment to collaborate. This may have been encouraged by the specific benefits which they identified that they had gained from working together. It

would seem that both parties appear to be rewarded by the collaboration and for this reason it continues.

6.3.2 CONTACT HYPOTHESIS

1. People favour their own group. They are prejudiced and hostile to people from other groups.

When using Contact Hypothesis to look at the responses from the teachers and therapists it was noticeable that both professionals appeared content with their current professional role. When asked directly whether they would rather be the teacher or therapist working with the children the majority were happy with their chosen profession.

'I enjoy speech therapy and the role I have and the intellectual stimulation of the job'. (SLT)

'I like working with the individual'. (SLT)

'I have an option to work inside and outside the classroom, I like that'. (SLT)

'I like working in the class atmosphere'. (T)

'I like being a teacher, there is constant variety'. (T)

'I like doing a range of things. A therapist is very specific in their work most of the time'. (T)

The teachers and therapists being interviewed did not express overt negative attitudes to people from other groups. In fact many of the comments were complimentary.

'I've always got on with speech therapists'. (T)

'I have thought about teacher training but I think at heart I am a therapist'. (SLT)

'I have other professional responsibilities so I suppose I envy Sue her centredness here'. (SLT)

'If I wasn't a speech therapist I would like to be a nursery teacher. I like working with groups but the staff here work terribly hard'. (SLT)

'Jo's job is very difficult I don't think I could do it'.(T)

'I had worked with her predecessor very closely and it just seemed a natural development'. (T)

2. Contact between members of 2 different groups will produce positive attitudes between them.

It was noticeable that the majority of interviewees had positive attitudes about the other person that they worked with and in many cases there are also positive feelings about the profession of their partner.

'I have worked with several speech therapists and they have the same approach to the children as I have'. (T)

'I admire her skills in getting everyone to work'. (SLT)

Three teachers stated that they had not had such a successful relationship with the previous speech and language therapist, or with those who had briefly visited the school. These negative feelings had been held prior to the current partnership.

It was interesting that on the whole whatever base the two professionals had they appeared happy with the arrangement.

When the therapist and teacher were both in school, they both appeared happy with this arrangement and when the therapist visited from a clinic both parties were content with this arrangement.

'I am free to join in activities with the school and I know other children and parents of children who are not in the unit'. (SLT same base)

'I don't get sucked into the school politics because I am not here all the time. I wouldn't want to be here full time'. (SLT different base)

'Being in the same place brings about modifications in my practice as a teacher...if we had a different base it would be terrible'. (T same base)

'I think space would be a problem if she was here all the time although she'd know where the children were socially. It works well at the moment'.
(T different base)

'I like working in different locations'.
(SLT different base)

The level of satisfaction could be to do with the apparent success of the current collaboration. The responses may have been different if there had been more conflict between the teacher and therapist.

3. Contact between people of different backgrounds will enable them to increase their knowledge and understanding of similarities as well as their differences.

The majority of interviewees were aware of some professional differences between between them and their partner. Although the level of awareness was often at a general rather than

specific level.

'Sarah can identify areas I wouldn't necessarily look at'. (T)

'My role is to identify and describe the child's communication problems in a linguistic way. Ann can't do that'. (SLT)

But some of the teachers expressed a lack of clarity about the therapist's work, either as a personal comment or because they felt other colleagues were unsure about what a speech and language therapist did.

'I don't think I have a perception of what a therapist does. I don't know what a speech therapy identity is and it would be useful to see her in other settings, to have a broader view of what she does'. (T)

'I see a therapist as working on one small area all the time'. (T)

'I'd like to see teachers understanding more the role of speech therapists'. (T)

'I don't know exactly what her job is, whether it is to deal with speech problems or to encourage speech from children who don't speak much. I suppose it is all those things'. (T)

There was evidence of some awareness of similarities between professionals but this was not as marked as the awareness of differences. They referred to similarities when talking about the ways in which they thought about the children.

'I was rather surprised to find that we thought along the same lines'. (SLT)

'We think in the same way about these children, we have the same hopes for them'. (T)

'When she came for interview and I saw the look on her face when we watched someone else's lesson I knew we felt the same way about the children. And I was right'.(T)

4. Conflict is reduced when a superordinate goal is introduced.

The only consistent superordinate goal which was referred to by the majority of the respondents was the needs of the child. Collaboration was seen as the best way to meet the child's needs, or the only way to work with children who had communication difficulties.

'It just has to be the best way to meet the child's needs'. (T)

'I think there is no advantage for a speech therapist in working in isolation with children with special needs'. (SLT)

'For the children's benefit, they gain so much'. (T)

'It is essential for the children that we do collaborate'.(T)

5. Contact needs to be for a prolonged period.

It is interesting that the length of time during which collaboration occurred does not seem to have influenced the responses either way. There is little difference in the responses from therapists and teachers who have worked together for 10 years or 3 months.

6. There should be official and institutional support.

When the therapist was based at a different place from the teacher, these pairs referred more often to the impact of management support on their collaborative partnership.

'I'd written to the school offering a visit and the headmaster of the school phoned me and said "Welcome to this area, please come and see us." He's always been encouraging'. (SLT)

'It is something that we are expected to do'.(SLT)

'It would be easier if our discussion time was specified by the person who does the timetabling'.(T)

'So I met up with the therapist and talked to her and the head teacher encouraged it'.(T)

The interviewees were asked how their collaboration first began in order to identify whether or not they had management support for this way of working.

The majority of pairs did not report any management support for the beginning of a collaborative relationship. They did not refer to any initial difficulties when starting to work together with the other person. In some cases they almost seemed to drift into working together.

'We began to overlap in the classroom'. (T)

'She asked me about a child in the staff room and it went on from there'. (SLT)

'She came in and we were introduced and she began to spend some time in my classroom'. (T)

There were some interviewees who had been professionally attracted towards the other person because of the way they thought the other professional approached their job or thought about the children.

'We have very similar ways of thinking about the children'. (SLT)

'I thought she's on our wave length'. (T)

'We are both very organised in our work and I like that, so that helped'. (T)

There was no evidence that any of the schools or units, or speech therapy teams had any written policy about collaborative working practices. Occasionally it was stated that a school expected a certain pattern of behaviour.

'It is the politics and expectations in the school that the therapists will work with the teachers'. (T)

'I am the therapist who works with that age group in this school.' (SLT)

In the majority of cases the pair of professionals were left alone to sort out a method of collaborating and this developed over time. The word 'evolve', was used in several interviews and suggests that the professionals involved saw collaboration as an active process. But there was little

evidence of a set procedure to reflect upon the process of collaborating. Also if anything went wrong in the working relationship interviewees were not aware of any procedure to deal with the problem.

Summary of findings related to Contact Hypothesis

These interviews were focussed at an interpersonal level and the teachers and speech and language therapists who were interviewed did not display any hostility to each others group. The occasional reference to a previously unsuccessful relationship does not really amount to hostility towards the other group. From their responses it would seem that they do have a positive attitude towards the other professional. It does seem that working together has enabled the two individual members of the different groups to develop positive attitudes towards each other.

The prediction that pairs of therapists and teachers based in the same unit or school would feel more positively towards each other than those pairs who had different bases was not supported. There was evidence that both teachers and therapists were aware of the differences between them in both their knowledge and professional practices but there was not much evidence of an increase or even an awareness of their similarities.

There was no support for the prediction that prolonged contact overcame conflict. There was little difference in responses to questions from people who had worked together for 3 months or 10 years. This may mean that when two professionals are working together contact for a prolonged period of time is not necessary to reduce conflict. Another explanation could be that the teachers and therapists had a superordinate goal which enabled them to overcome any conflict. This goal appeared to be an effective outcome for the children they were working with.

From the initial investigation of the data, it appears that neither Contact Hypothesis or Social Exchange Theory is fully supported.

6.4 IMPLICATIONS OF THE FINDINGS FOR THE TWO PROFESSIONALS WORKING TOGETHER

The implications of the findings from the interviews for speech and language therapists and teachers who work together will be considered next.

It would seem that for teachers and speech and language therapists to work together, without conflict, they need to be able to identify something that they will gain from working in this way. The gains or benefits may be personal,

professional, altruistic or any combination of these. Acquiring new information or learning from the other person seems to be a clear benefit for many people. This may be part of the developmental process when two people are working together or it may be the result or product of a collaborative partnership.

Contact between teachers and therapists would appear to be beneficial in helping them to view each other in a positive way. It does not seem to matter whether teachers or therapists are based in the same place or not but rather that they are content with whatever base they work from. It is not clear from this research whether one could assume that a satisfactory working relationship helps people to overcome the difficulties that may arise from the fact that they are based in different places. Or whether people who develop successful collaborative relationships with other professionals do not experience working from a different base as a problem.

Therapists and teachers who are going to work together or those who already do so will only be generally aware of the professional differences between them. They will be even less specific about the similarities between the two professionals.

SUMMARY

The two theories of Social Exchange and Contact Hypothesis provided useful frameworks for devising an interview schedule. Forty professionals were interviewed, half of them were speech and language therapists and the other half were teachers. They were working together and were willing to be interviewed. Half of the pairs were based in the same place while in the other group they had separate bases and the therapist came into school as a visitor.

The components of the theories were used to devise categories which were used in coding the interview transcripts.

After analysing the information which had been collected from these willing collaborators, it was clear that neither theory was fully supported.

The supported aspects of Social Exchange Theory are that there are identifiable benefits from such a professional interaction as well as costs. In this piece of research it also appeared that both parties are rewarded by the exchange and have made a commitment to it.

The predictions from using Contact Hypothesis which are supported, are that contact between teachers and therapists

does produce positive attitudes; the professionals are aware of the differences between them and they often have a superordinate goal which is altruistic.

One unexpected finding was that so many teachers and therapists reported gaining new knowledge as a benefit of their collaboration. This was also the issue around which there was the most reciprocity. This finding will be discussed in greater detail in the following chapter.

CHAPTER 7

DISCUSSION

INTRODUCTION

This study began because of a professional belief in the importance of collaboration when working with children who have communication problems.

The longitudinal studies described in chapter one by Silva, McGee and Williams (1983), Paul and Cohen (1984) and Bishop and Edmundson (1987) illustrate the problems that children with communication difficulties have in their school career. If teachers and speech and language therapists can work together then some of the children's academic and linguistic difficulties can be alleviated.

At the beginning of this research project the following questions were posed :

1. How do speech and language therapists respond to teachers concerns about children who have speech and language difficulties ?
How do speech and language therapists work with such children and their teachers ?
2. Does the work base of both the teacher and speech and language therapist influence collaboration ?
3. Is there a different pattern of contact and subsequent collaboration for pre-schoolers and school age children ?
4. What form does collaboration between teachers and speech and language therapists take ?

5.How do the knowledge and skills of the teacher and speech and language therapist enable them to meet children's needs ?

6.What are the implications for the delivery of services for children with communication problems ?

A library search looking for evidence about professionals from different groups working together revealed that there was little information on this style of working between speech and language therapists and teachers. So this study began with an investigation and description of the patterns of collaboration in England and Wales.

Postal questionnaires were sent to therapists who worked in clinics and schools to investigate the effect of the work base on teacher-therapist collaboration. The questionnaires enabled factual information to be collected about how speech and language therapists began and maintained working relationships with teachers.

Then interviews were carried out with pairs of teachers and therapists who were willing to talk about their collaboration. The face to face meeting enabled their responses to be probed and the replies contrasted with the components of Contact Hypothesis and Social Exchange Theory, in order to see if there was support for either or both of these theories.

This chapter begins with an evaluation of the methodology used in this study. Then the research questions seen above are used as a framework for interpretation and discussion of the results of both the survey and the interviews. Finally, the possible areas for future research into professional collaboration will be considered.

7.1 EVALUATION OF METHODOLOGY USED IN THE RESEARCH

The methodology used in the first part of this research enabled a large number of speech and language therapists to be contacted. It is possible that the use of Speech Therapy Managers as an intermediary point may have meant that some therapists were omitted from the study because they had been excluded by their managers. As there is no complete and current list of therapists who work in England and Wales nor where they are based it would have been difficult to contact so many therapists without using the managers as a medium.

In attempting to gain information about the working practice of therapists who saw children under-5 years of age, 5-11 years and those who worked across all both these ages, it is not clear that therapists stuck strictly to the criteria laid down. The task may have been too ambitious for this questionnaire.

The questionnaires were sent back to the college where the researcher worked. Although anonymity was assured, there is no way of knowing that people did not try to present the most positive picture about collaboration. This highlights one of the main criticisms of this methodology. There is always a risk that the respondent will want, quite naturally, to present themselves in the best possible light. However, without using a postal questionnaire this research would not have been possible. Even with these reservations it is felt that the data collection method which was chosen, was the best one for this research.

The questionnaire was balanced by the use of a semi structured interview in an investigation of willing collaborators - teachers and speech and language therapists. The interview allowed the interviewees' replies to be probed immediately and any ambiguities clarified during the face-to-face contact. Again, it is always possible that the people being interviewed try to present a positive image of their partnership. In these interviews each partner was seen for an average of 45 minutes. One might have expected any inconsistencies to become apparent during such a time period.

Subjective bias could have occurred because the researcher carried out all the interviews. An attempt to limit this was made by taping the interviews and looking for an above

chance level of agreement between the coders when analysing the data.

It is believed that a combination of the two methods, postal questionnaire and interview enabled the current process of collaboration between these two professionals to be described with some accuracy and the advantages and disadvantages of this way of working to be considered.

CRITIQUE OF SOCIAL EXCHANGE THEORY AND CONTACT HYPOTHESIS

From the initial investigation of the data, it appears that neither Contact Hypothesis or Social Exchange Theory is fully supported. It is appropriate therefore to re-consider both these theories in the light of the results of the study. Then the overall findings of the research will be discussed in the rest of this chapter.

Social Exchange Theory

The economic viewpoint of social exchange theory that when costs rise and profits decrease then interactions cease was not supported by this research. This suggests that this theory is not very helpful when investigating professionals working in the education service. It encourages one to ignore other aspects of the health and education systems such as, the recent legislative changes referred to in

chapter 1, which have an impact on the way these professionals work.

Social Exchange Theory is only partially supported by the results of this study. Those components which are supported include the view that people profit from interactions, the interactions only continue while both parties are rewarded and people make a commitment to their current interpersonal interaction. There was no support for the view that the greater the reward the greater the effort a person will expend or that as the costs increase the interaction diminishes. The aspects of the theory which are supported by the research will be considered first and secondly those which are not.

One of the main components of this theory which was supported by the responses of both the teachers and therapists was that people receive profits or gain advantages as a result of their interactions with each other. The interviewees were also aware of the disadvantages of such interactions, such as no longer being in complete control of all that went on in the classroom or the therapy session. The disadvantages which arise in any interaction are not explicitly referred to in social exchange theory. It may be that the disadvantages could be interpreted as the 'costs' of an interaction. If this interpretation was used then according to the theory, there should be evidence of

reduced interaction as the disadvantages increase. There was no evidence to support this view.

There is a weakness in a theory which can be used to look at interaction which does not encourage people to look explicitly at both the advantages and the disadvantages of such behaviour. Because there is a risk that both parties could become so distracted by the disadvantages that they never reach the point of appreciating the profits or advantages.

Another aspect of the theory which was supported was the view that interactions will only continue if both individuals are rewarded. In the interviews both teachers and therapists provided explicit and implicit references to the ways in which they were benefiting from the interactions with the other professional.

The people interviewed in this study appeared to have made a commitment to the professional exchange or interaction in which they were currently involved. This finding supported the component of social exchange theory that people make a commitment to their current interaction. It seemed that many people did this because they believed that it was the only way that the child or children they were concerned about would benefit.

However the following aspects of the theory did not receive support from this research. In social exchange theory it is stated that the greater the reward the more effort or energy the person will use in obtaining it. If a person is running, walking or operating machinery the physical effort they expend can be monitored and measured. Comparisons can then be made between the amount of effort an individual makes at certain times. So it is possible to identify when minimum and maximum effort is being made. However, this aspect of the theory is not so useful when the interaction where the effort or energy is being expended is predominantly verbal. It makes it difficult to quantify and compare the effort made with other verbal interactions.

In this study there was also no evidence to indicate that individuals could or would have put more effort into their attempts to collaborate with a colleague if the reward had been greater. This suggests that this aspect of social exchange theory is not helpful when considering interactions between people in educational settings. In other settings such as business, where an individual could be rewarded by promotion or money it would be possible to have a scale of rewards that one could be seen as 'greater' than the others. In such a situation it would be possible to see if a 'greater reward' produced more effort. However, in education and health the rewards for effort are rarely as tangible or comparable. In this study the therapists and

teachers appeared to have an altruistic reward i.e. the progress the children make in their communication skills. A reward such as this is difficult to measure as it is dependent on the results of the interaction for a third party - the child. Although in this research there was evidence that both professionals gained knowledge from each other during their interactions. This increase in knowledge was labelled cognitive gain by the researcher. As it had not been predicted as an outcome of the interaction it was not measured during this study.

Another aspect of social exchange theory which was not supported in this research was the view that the effort of overcoming the costs would diminish the value of the working relationship. In fact the majority of interviewees felt that the more they collaborated, the more they valued it. They were aware, as stated earlier, of the costs of working in this way but the benefits seemed to outweigh the disadvantages. Both teachers and therapists had specific topics which they wanted to focus on and definite areas which they wanted to improve.

When looking at the research findings the most valuable aspect of social exchange theory is if the advantages and disadvantages of working together are conceptualised as the profits and losses. This enables one to see professional interaction as a trading situation where everyone must

expect some losses. Although the disadvantages of interactions are not explicitly mentioned in social exchange theory they could be seen as the losses or costs of this way of working. If this interpretation was used then professionals would be better prepared for the disadvantages as well as the advantages of working together.

Some components of social exchange theory are not helpful. It is difficult to measure how much effort people put into the interaction. In this study it was impossible to evaluate this aspect apart from relying on peoples' own perceptions of the amount of effort they put into the working relationship. Also the view that people make more effort 'the greater the reward' was not supported. In fact it may be unrealistic to try to quantify the rewards which professionals gain from working with children.

Contact Hypothesis

Contact hypothesis was utilised when the interview schedules were being designed and although it has been used when looking at group interactions these interviews were focussed at an interpersonal level. This may account for the fact that none of the components of contact hypothesis are fully supported by the research findings.

The view from contact hypothesis that people favour their own groups and are hostile to people from other groups was not supported by the results of this study. The teachers and speech and language therapists who were interviewed did not display any hostility to each other's professional group. It was felt that the occasional reference to a previously unsuccessful relationship did not really amount to hostility towards the other group.

There was partial support for the component of contact hypothesis which states that contact between members of different groups enables individuals of the different groups to develop positive attitudes towards each other. Although contact alone cannot be the complete explanation for these positive attitudes. If it were, the professional pairs who had the most contact, that is the pairs of therapists and teachers based in the same unit or school, would display more positive feelings towards each other than those pairs who had different bases. This situation was not supported in this study.

There was no support for another component of the hypothesis, which stated that contact needed to be for a prolonged period. There was little difference in the answers given to questions by people who had worked together for either 3 months or 10 years.

There was support from the interviewees that contact between members of different groups made them more aware of the differences between them. The teachers and therapists reported clear differences in both their knowledge and professional practices. However, there was no evidence of an increase or even an awareness of the similarities between the two professionals. This may have been a predictable result as two professionals will usually be aware of differences first and may never become aware of the similarities.

There was no evidence for the view from contact hypothesis that official and institutional support was needed to reduce conflict and ensure a good working partnership.

It appears that the following aspects of contact hypothesis are not supported at all by this research firstly, contact develops good working relationships and a positive attitude between members of different groups, secondly that contact needs to be for a long period of time and finally that it requires official and institutional support.

There did seem to be support for the view that a superordinate goal helped facilitate a working relationship and reduces any possible conflict. In this study all the professionals wanted an effective outcome for the children with whom they were working.

The findings from this research indicate that contact hypothesis offers very little when one is trying to facilitate collaboration between individuals from health and education.

7.2 HOW DO SPEECH AND LANGUAGE THERAPISTS RESPOND TO TEACHERS CONCERNS ABOUT CHILDREN WITH SPEECH AND LANGUAGE DIFFICULTIES ?

The results from the survey showed that teachers were only one of many referring sources for a speech and language therapist. A finding which is in keeping with the study by Edwards, Cape, Foreman and Brown (1985).

It was the perception of speech and language therapists that teachers contacted them directly when they were concerned because a child was unintelligible.

Teachers of children between 5-11 years also sought advice on classroom management. The class teachers in the study conducted by Tomes & Sanger (1986) indicated that the management advice which they received from therapists was not satisfactory. In this research the issue of whether the teachers were satisfied or not with the advice they received was not investigated.

Where the teacher was not the source of the referral the therapist in a health centre who saw a child would not

always contact the child's teacher. Only two-thirds of the therapists in the survey would get in touch with the teacher or school as a matter of routine. If a child referred for therapy failed to attend an appointment at a health centre, many therapists did not inform the child's class teacher.

This raises several points. The first is that children who fail to attend for speech and language therapy are usually those who are causing their teachers concern and the teachers should be informed if appointments are being missed. Secondly, a head teacher cannot contact the clinic to arrange for the therapist to visit the school if they do not know that the child is not being seen. Thirdly, if teachers have no experience of being involved in the assessment and planning of intervention strategies for children with communication problems, they may believe that if the therapist was really concerned about a child, they would contact them. A lack of contact between teachers and therapists also means that teachers miss the opportunity to develop their own skills in the area of communication problems which is something the Clough and Lindsay (1991) study found teachers wanted to do. If a teacher does not hear or see the therapist even if the child is not attending therapy, this may be interpreted as a lack of concern on the part of the therapist. If there is a clear policy in the Health Authority about discharging a child if they fail to

attend, it can be difficult to persuade a therapist to spend time going into school to see the child.

7.3 HOW DO SPEECH AND LANGUAGE THERAPISTS WORK WITH SUCH CHILDREN AND THEIR TEACHERS ?

The details of collaborative working patterns are discussed in a later section. This section gives general information about which teachers the therapist works with and the type of therapy offered.

Speech and language therapists mainly work with a child's class teacher. Although they will work with other teachers who are involved with the child and who seek their help. The head teacher rarely influenced the therapist's choice of teacher. Whether or not the teacher had an additional qualification in working with children with communication problems did not seem of particular concern to the therapist. This may be because the therapist was unaware of this qualification or because so few teachers have such a qualification. Noble (1989) speaking as a representative of AFASIC suggests that there should be 38,000 specifically trained teachers to work with children who have communication problems. The current courses described in chapter 2 obviously cannot begin to meet this need .

The way in which therapy was offered was most commonly a combination of individual as well as group therapy. Overall

the findings from the survey indicate that speech and language therapists who work in educational settings still remove children from the classroom in order to offer therapy. This may be influenced by the theoretical model which the therapists use. Dependency on the linguistic model particularly at the phonological, syntactic and even semantic level may mean that therapists take children out of class to work at an individual level. This limits the opportunities for teachers and therapists to share topic material and observe each other working with a child. In a study of classroom and specialist teachers Meyers, Gelzheiser and Yelich (1991) found that asking specialists to work in the classroom and getting the two teachers to plan an intervention procedure facilitated collaboration. If therapists remain outside the classroom for the majority of the time they are missing opportunities to work together.

7.4 DOES THE WORK BASE OF BOTH THE TEACHERS AND SPEECH AND LANGUAGE THERAPIST INFLUENCE COLLABORATION ?

One of the most important findings from the survey of speech and language therapists in England and Wales was actual evidence that the therapists' base does indeed influence their current practice when collaborating with teachers.

School based therapists were more likely to work closely with teachers than clinic based therapists. Of the school

based respondents 92% indicated that they had worked closely with at least one teacher, whereas only 72% of the clinic based therapists stated that they had worked closely with at least one teacher.

One way of interpreting these figures in the light of the data collected and presented in chapter 5, is that clinic based therapists who go into schools are the least experienced and yet are expected to take on the professional role of facilitating, teaching and exploring collaborative possibilities with teachers. This is a very demanding role for a newly qualified person and does raise the issue about whether therapists have the training in their undergraduate courses to cope with this. When Conoley and Conoley (1992) are considering what inhibits consultation in schools they state that among other factors,

'appropriate training or practicum experiences have not been included in the professional socialization of the consultant'.

(p. 95)

The same must be true for learning about collaborative patterns of working with other professionals. This can be dependent on how students' professional and college tutors perceive collaboration. If they do not value this style of working there may be limited opportunities for the student to experience such patterns of work. At the College of Speech and Language Therapists Forum on Working in Education

(1993) it was apparent that many therapists saw working in mainstream schools and professional collaboration as a specialist area and not one to which undergraduates or newly qualified therapists should be exposed. This approach limits the opportunities for the embryonic professional to learn how to collaborate. Higgin, Leach, Mann & Mortimer (1992), four therapists who trained as teachers urge

'an increased liaison between those responsible for speech therapy and teacher training would facilitate reciprocal understanding'. (p19)

If therapists and teachers have experience while they are training of professionals working together, it will ease the situation where a clinic based therapists has to make a special arrangement to visit a school. It will still mean that both teachers and therapists have to spend more time negotiating around timetables but it may become less of a disadvantage than the clinic based therapists in the survey saw it. School based therapists working in the same building with the same children as the teacher will still continue to have more opportunities for talking about the children and work.

These opportunities for the therapist and teacher to talk to each other throughout the working week seem to aid the process of collaboration. It was noticeable that clinic based therapists referred to a lack of time as an inhibitory

factor in their attempts to collaborate more often than the school based therapists. The clinic based therapist is working within a specific time constraint on every school visit.

The influence of the work base was marked when therapists were considering whether or not their relationship with teachers in general had changed over the time they had been working. Twice as many clinic based therapists felt that no change had occurred in their relationship with teachers since they began work. One can only speculate about the reasons for this. Some of the influencing factors may be too little professional experience, the therapists were too inexperienced to be aware of change or that they have not worked with a particular teacher for long enough for change to occur.

Those therapists who reported a change acknowledged that it was their own attitude which had changed. This produced benefits.

This change in attitude appeared to be linked to increased personal and/or professional confidence so that they felt more secure in what they could offer teachers. A professional who has confidence in their own skills may be more comfortable when working in different settings and so more at ease in their interactions with other people.

A small number of respondents from both groups had grown more comfortable in school and believed that this had influenced their relationship with teachers.

For therapists in schools their increased knowledge of what the teacher had to offer, which they had gained over a period of time, was equally as important as the professional changes that they had made in the way their service was delivered.

There was no evidence to support the view that official and institutional support was required to ensure people had a positive view of each other but the group where the therapists were clinic based made more references to management support than the others.

7.5 IS THERE A DIFFERENT PATTERN OF CONTACT AND SUBSEQUENT COLLABORATION FOR PRE-SCHOOLERS AND SCHOOL AGE CHILDREN ?

The information related to this area was mainly collected from the results of the survey. The findings are inconclusive and only in the areas given below are there clear differences. Speech and language therapists who worked with children under 5 years of age often had the initial discussion with the teacher in the classroom of the nursery. In this situation the nursery teacher may not be free to talk and both the therapist and the teacher will

find it difficult to concentrate. The therapists seeing these children were more likely to see them in the classroom than in a separate room.

It was also noticeable that individual therapy sessions, rather than group ones were most commonly offered to children between 5 and 11 years of age. One could speculate that these sessions would take place outside the classroom and would not foster contact between the therapist and teacher. It can also make it difficult for a child to generalise their learning. If new linguistic skills or knowledge are taught away from the classroom a child may acquire those abilities in that specific setting but be unable to generalise them into other curriculum activities without specific help.

All therapists, regardless of the age of the children they were seeing, recorded a short follow-up discussion time, often the equivalent length to a morning or afternoon break. The quality of the discussion which can take place in this time would be questionable.

As stated earlier the exploration of the differences between the service provided to children who were less than 5 years old and those between 5-11 years was the least successful aspect of this study. It would appear that the main differences in the provision of speech and language therapy

services between the age groups are about whether therapy is provided in a group or individually and the venue for discussion between teachers and therapists.

7.6 WHAT FORM DOES COLLABORATION BETWEEN TEACHERS AND SPEECH AND LANGUAGE THERAPISTS TAKE ?

Before considering what light is thrown on the above question by the results of the survey, it is relevant to look at the results of another survey carried out by Miller (1991) for a report to the DES. Miller asked 274 teachers who were working in settings for children with speech and language problems what subjects should be in a specialist course for teachers who work with these children. Over half of the respondents indicated that there should be information about language assessment and test procedures.

The results from the survey reported in chapter 5 revealed that the current practice of speech and language therapists when working with any teacher is for the therapist to assess the child. The teacher is rarely included in this process. In such a situation the teacher would feel uninformed about the assessment procedures and tests being used. These results could explain Miller's findings.

Stevens and Roulstone (1991) state :

'A fundamental requirement if therapists and teachers are to work together is that assessment and goal setting should be a joint responsibility' (p.87)

It is clear from the results of the survey that this practice is not occurring. After an assessment is complete, then some collaboration occurred. Half of the school based therapists planned the child's intervention with the teacher. Only a third of the clinic based therapists planned any intervention with the teacher. This may be because joint planning necessitates a visit to the school and time to work out the intervention plan. A clinic based therapist can find this difficult to organise. There is not enough time for joint planning if each visit to a school is only for a short period of time. Planning needs to be a continuous process and the length of the subsequent visits made by the speech and language therapists to schools, do not appear to be long enough for this planning to happen. It is clear from the data that school visits which are of 10-15 minutes duration cannot be long enough.

Although these time periods seem too short for any planning to occur they would seem long enough to hand over information about how a teacher might continue a therapy programme. This was certainly what the clinic based therapists seemed to rely on the teacher for. It was at the

intervention stage that therapists often reported that collaboration with teachers took place. This was true of both clinic and school based therapists.

It seems from this pattern of responses that therapists saw joint intervention as synonymous with collaboration. In this situation it is not clear how involved or committed to an intervention strategy a teacher may be. They have after all had no involvement in the assessment of the child or in the planning of the remediation programme.

There was nonetheless overwhelming agreement in both survey and interviews about the importance of collaboration. In the survey therapists indicated that it was only at the intervention stage that collaboration was most important. It was seen as a way of ensuring an effective outcome for children with communication problems. However, in the interviews the importance of collaboration at other stages for example, planning was also seen as very important.

To achieve an effective outcome, clinic based therapists asked the teachers to continue the intervention programme between therapy sessions. In fact, the clinic based therapists recorded continuation of therapy input as the most important reason for collaboration. This ensured that work begun by the therapist would be continued at school during the rest of the week. However, Norwich (1990) makes

the point that if the teacher is doing the direct work with the child the teacher is in a subordinate position to the therapist's goals. This is not a situation in which collaboration can occur.

Although both clinic and school based therapists saw collaboration as an important way of pooling information with the teachers. They also perceived it as a way of achieving professional development.

When identifying factors which facilitated collaboration, regular contact, the perceived level of management support, having mutual goals, time to talk and meet with colleagues and motivation to collaborate were referred to by therapists. However, these were not the most important reasons. The factor most frequently cited by therapists in the survey results as facilitating collaboration was being appreciated by those people they worked with. This is one way in which an individual can gain some feedback about their professional effectiveness.

The teachers and therapists who were interviewed also referred to being appreciated as an important aspect of their collaborative way of working. It was noticeable that more therapists than teachers referred to the enjoyment they found in working collaboratively. This may be because the

usual alternative for a therapist is to work on a 1:1 basis with a child with little or no contact with other professionals. During their undergraduate training and practical work both teachers and therapists work and learn in groups but after qualification therapists are much more likely to work in isolation than teachers.

When looking at factors which inhibited collaboration, those such as a lack of mutual goals, little regular contact between therapist and teacher and a perceived lack of management support were referred to but did not appear to be as important as might have been anticipated.

School based therapists referred to a lack of motivation to work together more than did clinic based therapists. In a school which does not have a policy of people working together, it can be hard to interest staff in working collaboratively. A therapist coming in from a clinic would be aware that a particular teacher was not motivated to work with them but could explain this in a variety of ways and ultimately the therapist has wide range of potential partners to choose from. A therapist based in the same school all the time has only a limited number of teachers to work with, so teachers who are not motivated to work collaboratively can have considerable influence on the way the therapist operates. In this situation therapists need support from their managers. The work of Georgiades &

Phillimore (1975) is a useful reminder to both managers and therapists that one person working in isolation to bring about changes to a system will not be successful. The therapist needs to begin to work collaboratively with those teachers who are interested in working in this way. Then a core group of collaborators can develop and may influence the rest of the school system.

Time alone will not ensure that collaboration occurs but a lack of time appeared to hamper the collaborative process. Both clinic based and school based therapists referred to lack of time and not being appreciated as the most frequent factors which inhibited collaboration. One of the things which may happen when time is short is that priority is given to face-to-face contact with children rather than to discussion with other professionals. In addition, any discussion time that there is may be focussed on the immediate and practical issues of planning intervention rather than retrospective evaluation and appreciation of previous work with the child.

As seen above not being appreciated inhibited collaboration between both sets of therapists and teachers. It would seem that for therapists to feel appreciated by another professional, the positive feelings have to be made explicit. This is difficult to do when time is short and any available attention is focussed on the child.

Unless a colleague makes it clear that they are gaining something from the working relationship, it is difficult to maintain it. This acknowledgement may take the form of appreciation or an indication that new knowledge is acquired, a cognitive gain. During the interviews both teachers and therapists referred to specific activities which they wished to pursue together to increase their knowledge and it was also seen as a way of improving their working relationship.

When Social Exchange theory was used to analyse the responses to the interviews the focus was the profits or benefits provided by an interaction as well as what it might cost. Half of those interviewed indicated that there is a 'cost' or disadvantage when they collaborate. Therapists seemed to be more conscious or aware of the disadvantages than the teachers. Therapists also felt that they were giving up some of their professional autonomy when collaborating with a teacher. They perceived this as relinquishing their role as an 'expert'. This links again with Norwich's (1990) point about what it is that encourages one professional to see themselves or be seen by others as an expert. The responses from the speech and language therapists suggest that isolation maintains the role of an expert. By working with others this role is relinquished and with it aspects of professional authority.

Both teachers and therapists believed that they benefited professionally and personally by collaborating. The professional benefits included such things as acquiring knowledge and information from the other person. In fact out of 40 individuals, 28 out of them, including both teachers and therapists felt that they had gained either general or specific information from the other professional.

It was interesting to note the reciprocity around this particular benefit. Half of the pairs interviewed referred to this. The cognitive gain which both therapists and teachers refer to has links with Robert Slavin's (1990) work on co-operative learning. He was looking at pupils learning via collaboration in the classroom. He reports that co-operative learning has a positive effect in the classroom on learning, altruism, intergroup relations and self-esteem. The training courses for therapists and teachers often encourage collaborative learning practices through workshop activities and study-groups. This way of learning is often lost upon qualification and the inexperienced professional may feel that they should know what to do without asking others. In this teacher-therapist study the interviewees were certainly aware of an increase in their knowledge after having worked together.

It is not clear whether the increase in knowledge or the cognitive gain expressed by the willing collaborators was the process or product of the collaboration.

The personal benefits derived from collaboration included increased enjoyment of the work situation, a feeling that it was a rewarding way to work and that it provided support. Individual teachers and therapists both found working in this way provided them with a support system.

According to Social Exchange Theory the more people collaborate the less they value it. This was not true of the interviewees, most of them felt that the more they collaborated the more they valued it. The others felt that the value remained constant. These views were held by teachers and therapists who had worked together for a long time as well as those who had not collaborated for very long.

The majority of interviewees had positive feelings about the other person that they worked with and in many cases they also stated that they felt positively about the profession of their partner. The length of time during which collaboration occurred varied considerably but did not stop a positive view of a professional partner developing in a relatively short period of time.

7.7 HOW DO THE KNOWLEDGE AND SKILLS OF THE TEACHER AND THE SPEECH AND LANGUAGE THERAPIST ENABLE THEM TO MEET CHILDREN'S NEEDS ?

Both professionals saw the needs of the child as being of paramount importance. This response was produced by both the survey and the interviews.

At the CSLT Policy Review Forum (1993) working in an educational setting was seen as a specialist post therefore one would expect clinic and school based therapists to perceive themselves as having different skills. Instead the therapists produced similar responses when asked to identify their own skills, regardless of their work base.

Counselling and diagnostic skills were rarely mentioned. The lack of reference to counselling skills was particularly noticeable amongst those who were school based. This could be because these therapists were not consciously using these skills on a daily basis. In a health centre where the intervention is more family centred, the therapist would be more aware of using their counselling skills. It may also have been a result of the survey and interview being focussed on the interaction between two professionals rather than the child and family.

Therapists referred most frequently to their ability to devise and deliver an intervention plan. They saw

themselves as interventionists not just assessors and diagnosticians. This was also the area where the therapists said they collaborated most frequently with the teachers. This raises the question as to whether intervention is the most important area of their work or are the processes involved in intervention and collaboration linked, for a therapist, in a way that assessment and collaboration are not. Intervention may be seen as routine so therapists could delegate this to someone else. This is what the clinic based therapists do when they expect or hope teachers will continue an intervention plan which they started. Whereas assessing a child's linguistic abilities is perhaps seen as a more specialised skill. This view may have been influenced by the medical model and helps the therapist to retain the view of themselves as experts in relation to teachers.

If therapists see themselves as experts but do not acknowledge that teachers are also experts, albeit in a different area it is difficult to work collaboratively. Conoley & Conoley (1981) define collaboration in the following way :

'Collaboration is the joining together of 2 or more individuals in an egalitarian relationship to achieve a mutually determined goal'.

An egalitarian relationship is not possible if one partner sees themselves as an expert. So what interpretation can be

made of the fact that the clinic based therapists saw collaboration with teachers as an important source of continuity for the therapy programme and ultimately for the children. The therapists who expected the teacher to carry on the 'speech therapy' in the classroom appear to be working with an expert-consultation model of service delivery. The therapists recognise that teachers have general knowledge about specific children in relation to their development, academic progress and family life but lack expert or specialised knowledge about communication problems. The therapists acknowledged that teachers are with the children all day and so the logical conclusion from this view is that a teacher is in an ideal position to maintain the therapy programme. However this is not working in a collaborative way.

The school based therapists referred to the teachers' specific teaching skills such as classroom management and group work skills and knowledge about literacy and numeracy much more than their clinic based based colleagues. Therapists working in schools are in a position to be more familiar with these aspects of a teacher's work than a visiting therapist and also much more likely to utilise this information. In Communicating Quality : Professional Standards for Speech and Language Therapists (1991) a therapist who works in a school is reminded that -

'At all times during assessment and intervention the therapist must recognize that teachers possess considerable skill and knowledge for use with the speech and language impaired child ; practical and realistic ways must be found to capitalize these skills'. (Point 10, p 61)

The clinic based therapist needs many more visits to a school to build up a picture of a teacher's specific skills and knowledge, whereas school based therapists acquire this knowledge over time in the same establishment.

As can be seen in the example above the therapists who were based in school were more aware of the skills of their partners. They were able to acknowledge the differences between them and their teaching colleagues. In the interviews there was partial support for the view that contact between people of different backgrounds will enable them to increase their knowledge and understanding of their similarities as well as their differences. This information was elicited using the components of Contact Hypothesis. The majority of interviewees were aware of the professional differences between them and their partner although these tended to be at an general level even when they provided examples of the ways in which their skills and knowledge differed from their partners.

The awareness of similarities between teachers and therapists was less apparent and fairly unspecific. Another interesting point was that most of respondents were

satisfied with their own profession. Several therapists perceived advantages in being the teacher with the child, but both teachers and therapists ultimately wanted to remain in their current profession.

SUMMARY OF RESEARCH FINDINGS

Before talking about the implications of these results it may be useful to summarise the main findings of the survey and the interviews which have been discussed above.

There was overwhelming agreement about the importance of collaboration from all therapists and teachers. However, it was also clear that collaboration occurred least during the assessment process. For clinic based therapists the main purpose of collaboration was to ensure a continuation of therapy between appointments.

As therapists referred to their intervention skills most frequently it may be thought that these were the skills they valued most. However they were also willing to share their knowledge or 'surrender' some of their expertise. This may mean that it is in fact the assessment skills which they value the most as these are rarely shared.

Most therapists felt that their relationships with teachers had changed over the time they had been working. They

attributed this most frequently to a change in their own attitude towards teachers.

The most common factor which both professionals believed facilitated collaboration was the feeling of being appreciated by those they worked with. In keeping with this response not feeling appreciated, as well as a lack of time to work together, would inhibit collaboration.

Both teachers and therapists acknowledged that there were benefits from collaborating. The most frequently mentioned and reciprocal being an increase in knowledge. They also recognised that there were disadvantages to working in this way ranging from fatigue to loss of professional autonomy or control.

It appears that the value of collaboration does not diminish over time. Teachers and therapists felt positive about the person with whom they worked and this feeling could develop over a relatively short period of time. They also became aware of the differences between themselves and their partners but were less aware of the similarities.

The profile of a therapist or teacher who has the potential to collaborate with the other professional is someone who is happy in their chosen profession; is aware of their own professional skills and knowledge, wants to collaborate for

the sake of the child who has a communication problem and believes that by collaborating they will ensure that their intervention will have a more effective outcome. This person also expects professional and personal benefits from collaboration but accepts that there will be a cost or disadvantage to working in this way.

7.8 WHAT ARE THE IMPLICATIONS FOR THE DELIVERY OF SERVICES FOR CHILDREN WITH COMMUNICATION PROBLEMS ?

The results of this research have both indirect and direct implications for service delivery. Cognitive gain is viewed very positively by the people involved. Although it is not clear whether the cognitive gain is the product of collaboration or it is the process through which successful collaboration occurs. Encouraging an exchange of knowledge between the teacher and the therapist may be one way of facilitating collaborative working. This would provide a more consistent and integrated learning environment for children with communication problems in both mainstream and special schools.

The patterns which emerged from the survey indicate that we cannot assume that collaboration is already happening. It appears that opportunities to acquire knowledge from other professionals need to be built into the working relationship. The people involved also need help in becoming conscious of this learning process. One way to do this would

be to use co-operative learning activities during in-service training courses and for managers to support such patterns of work by helping their staff to be aware of their own cognitive gain. It is acknowledged that this requires time to be allocated for this kind of professional reflection but if children are to receive a co-ordinated response from teachers and therapists it will be time well spent.

In initial training it appears to be crucial for both teachers and therapists to have a clear awareness of their professional skills and knowledge. Opportunities for joint lectures and joint placement in educational settings would facilitate future collaboration (Conoley & Conoley 1992). It would also facilitate their development of understanding the similarities and differences between the two professional groups.

The speech and language therapists recommended clinical experience in educational settings as a way of learning to collaborate. The results from the interview and survey data support the view that post graduate and undergraduate multidisciplinary courses require teaching methods where collaborative learning has to take place. This would aim to foster good working practices and links with the work done by Smith & David (1987). They were the lecturers who worked with undergraduate teachers and therapists arranging for them to carry out joint assessments of children.

Therapists who are newly qualified and working in clinics need clear guidelines about when and how to contact schools. It cannot be assumed that every new graduate has been exposed to good clinical practice while training and knows how to establish links with schools. They also need support for routine contact with schools. Even those therapists with more experience, require support at the professional and institutional level in order to ensure that sufficient time can be spent in assessing, planning and evaluating activities with teachers. Silliman, Wilkinson, Belkin and Hoffman (1991) believe that 'collaboration is a continuum of joint effort' which has time and cost implications. It is acknowledged that this may require managers to recognise the importance of both professions in enabling a child with communication problems to achieve their full academic and social potential. Although ultimately collaboration should produce increased efficiency through a quicker and co-ordinated response to children with communication problems.

Another implication of successful collaboration could be staff stability through increased job satisfaction and professional development. Often people move jobs to gain new knowledge or to gain job satisfaction. The findings from this study suggest that successful collaboration with another professional will fulfil these needs.

Although the findings from this research do not indicate that collaboration is dependent on management support they do suggest that managers have a role in facilitating and providing supportive contexts within which collaboration can occur. Both teachers and therapists acknowledged the costs of collaborating. Their managers need to be aware of the effort and time which goes into this type of work and acknowledge these, while encouraging staff to continue the collaboration.

7.9 RECOMMENDATIONS FOR FURTHER RESEARCH

The findings in this research were collected at one moment in time. It was not possible, except retrospectively in the interview, to investigate the developmental nature of a collaborative partnership. It would be useful to record changes in a professional relationships over time. Then it would be possible to see if there is a common pattern and to be aware of any times of particular difficulty. This would enable those supporting staff who work in this way, to help them through these problems.

One way of gaining information about the ways in which a collaborative partnership develops would be to observe newly collaborating pairs of speech and language therapists and teachers over a period of time such as a school year. Semi-structured interviews taking place on a half termly basis

would enable changes to be recorded. Their perceptions of their own professional roles and how these changed over time could be recorded. It would also be possible to keep a record of the knowledge and skills they learnt from each other. One would expect such an approach to alter the relationship because it would make the people collaborating much more aware of the process in which they are involved. However, this would hopefully facilitate the development of the relationship rather than interfere with it.

A major implication from this research would be to offer undergraduate and certainly post graduate training to both teachers and therapists at the same time. One way of studying changes over time would be to follow-up individuals after a short post-graduate training course which had as its brief a specific focus on improving collaborative partnerships. As the stimulation of a course may produce short term gains anyway it would be necessary to carry out a follow-up evaluation at least one term after the course ended.

A more radical suggestion is a return to pre-Quirk days when there was a school speech therapy service. In many countries, especially Scandinavian countries speech and language therapists who work with children either train initially as teachers or train only to work with children. Thus a large proportion of their course content is similar

to that covered in teacher training. So at the start of their professional career they have a common vocabulary and greater understanding of the classroom as a learning environment. This may facilitate early interaction between these two professionals.

The research findings also suggest that to avoid teachers feeling therapists were 'expert' that therapists need to spend more time in schools. This has implications for NHS and LMS funding but could be possible where one school or a cluster of schools decide to contribute to additional time from speech and language therapists.

One of the strategies which was rejected for this study but could now be carried out utilising information gained from this research, would be to look at therapists and teachers who were not collaborating successfully. It would be possible to use the interview schedules to see how the responses from unsuccessful collaborators compared to those in this study. Bearing in mind the results of this research one would predict that when two professionals were not collaborating or were trying but failing to collaborate the costs would outweigh any benefits. One could also predict that they would feel that collaboration was not helpful for the children they were working with and they would also be unaware of learning anything from each other.

Among the benefits that teachers and therapists identified in this study when working together was cognitive gain. This suggests that whether the people involved are conscious of it or not, collaboration can produce an important exchange of information. It is not clear whether cognitive gain is part of the process of collaborating or an end product. To attempt to measure the cognitive gain by each partner during the collaboration a pre and post test of knowledge about communication problems, curriculum content and teaching strategies would have to be devised. This could be used in conjunction with a record of the individual's views of what they had learnt from their professional partner.

The question may then be asked whether the facilitating effect of the exchange of information would differ if the perceived baseline of knowledge of each of these professional pairs were different, that is, if one, both, or neither of the pair were considered to be a 'specialist'.

In order to attempt such a study it would be necessary to look at the interactions of teachers and therapists working with one particular group of children with communication problems. Those working with children who have severe learning difficulties (SLD) would be an ideal group to consider. It would be possible to define specialist teacher and/or therapist by virtue of their experience or qualifications. Neither therapists nor teachers are required

to obtain specific qualifications in order to work with children with SLD. However, despite this, there are a number of teachers working in special schools who have a qualification which identifies them as specialists within the education system. Speech and language therapists have limited opportunities to acquire a specialist qualification for working with such children. To date, only three Advanced Clinical Studies have been accredited for therapists working with people with learning difficulties by the College of Speech and Language Therapists. Consequently, only a small number of therapists have received the certificate or diploma by which they are recognised within the profession as specialist.

There may be several different combinations of specialist/non-specialist pairings when teachers and therapists work together. Both could have additional qualifications or both could be equally inexperienced, the teacher may be the specialist and the therapist not and vice versa. If an exchange of information is an important component of collaboration, then it may be possible to suggest that the collaborative process in each of the pairings will be different. In each case the specialist/non-specialist nature of the pairings should affect the nature of the collaborative gain. It may then be possible to test further the hypothesis that the knowledge acquired through

collaboration actually facilitates interprofessional working practices.

CONCLUSION

This research began with a hope of finding descriptions of collaboration between teachers and speech and language therapists which could be used to design training programmes to help these two professionals work well together. There was no published literature in this area so the study became one which identified, described and tried to analyse current collaborative practices between speech and language therapists and teachers.

Therapists and teachers who collaborate when working with children who have communication problems do it because they believe it is the most effective way of helping the children. Even though speech and language therapists who completed the questionnaire do not seem to interpret collaboration in the same way as it is defined in the literature.

Evidence was collected which supported the view that the base of the speech and language therapist did influence the way in which therapists contacted and began to work with teachers. However for therapists and teachers who were collaborating the influence of the base was much less

noticeable. It was also clear that time is not a necessity for collaboration but that a lack of time can hamper the development of a working partnership.

There was partial support for both Contact Hypothesis and Social Exchange Theory. Both approaches enabled useful information to be collected but neither provided the complete explanation about why some speech and language therapists and teachers successfully collaborated. It was apparent that there were many benefits from collaborating. The one benefit which had not been expected from this research was the knowledge gained from the other professional and the amount of reciprocity over this benefit.

In order to work successfully with another professional it would seem that one needs to be secure or at least comfortable with ones own professional skills and to be aware of the costs of collaborating so that it is approached in a realistic manner. If teachers and therapists can be encouraged to become aware of learning from their professional partner and in-service training courses are offered which utilises a collaborative learning framework, then the resulting increase in awareness of colleagues' professional differences and similarities can only be of benefit to children with communication problems.

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APPENDIX 1

LETTER SENT TO DISTRICT SPEECH THERAPY MANAGERS

Dear

Re : Speech and Language Therapist/Teacher Collaboration

I am a lecturer on the undergraduate B.Sc. (Speech Sciences) course currently engaged in research on speech and language therapist/teacher collaboration. I am being supervised by Professor Klaus Wedell at the Institute of Education, London.

In order to gather data I am asking speech and language therapists to complete a questionnaire about how they make contact with teachers and/or begin working with them. There are two separate questionnaires, one for therapists based in a clinic and one for those based in schools or units.

I wondered if the therapists in your district, who work with children between 3 and 11 years of age would be willing to fill in such a questionnaire.

Could I send the questionnaires to you to hand out ? I appreciate that this is putting an extra load on your already busy timetable. If you feel able to hand out the questionnaires please let me know how many you need for your clinic based therapists and how many for the school based therapists as well as the names of the recipients.

I do hope your district will be able to help in this matter. The replies will be returned anonymously. I hope to publish my findings thus providing the profession with additional information on this area of collaboration.

I look forward to hearing from you.

Yours sincerely

(Miss) Jannet A. Wright L.C.S.T. M.A.
Lecturer and Clinical Tutor.

APPENDIX 2

A LIST OF HEALTH DISTRICTS WHERE THE SPEECH THERAPY MANAGER WAS CONTACTED USING THE LETTER AS SEEN IN APPENDIX .1

The districts are listed under Regional Health Authorities. When a district was unable to take part or did not reply to the original letter this is noted alongside the name of the district.

North East Thames.

Barking, Havering & Brentwood
Bloomsbury
Enfield
Essex (North East)
Haringay
Newham
Southend

North West Thames.

Bedfordshire (North/South) No reply to initial letter.
Ealing
Hertfordshire (East)
Hertfordshire (North West)
Hillingdon
Paddington & North Kensington

South East Thames.

Brighton
Camberwell
Dartford & Gravesham No reply to initial letter.
Kent (South East)
Lewisham & North Southwark
Medway

South West Thames.

Chichester
Kingston & Esher
Mid Downs Unable to take part.
Surrey (East)
Surrey (North West)
Surrey (West) & North East Hants
Worthing

East Anglia.

Cambridge	
Huntingdon	
Norwich	No reply to initial letter.
Suffolk (East)	No reply to initial letter.

Merseyside

Chester	No reply to initial letter.
Halton	No reply to initial letter.
Macclesfield	
South Sefton	
Wirral	No reply to initial letter.

Northern.

Cumbria (South)	No reply to initial letter.
Darlington	
Durham (North West)	No reply to initial letter.
Gateshead	Unable to take part.
Newcastle upon Tyne	
Sunderland	Replied too late to be included.
Tees (South)	
Tyneside (South)	

North Western.

Bolton	
Lancaster	
Manchester(Central)	
Manchester(South)	
Preston	
Rochdale	
Stockport	Replied too late to be included.
Trafford	

Oxford.

Berkshire (East)	No reply to initial letter.
Kettering	
Northampton	
Wycombe	

South Western.

Cornwall & Isles of Scilly	
Exeter	No reply to initial letter.
Plymouth	
Somerset	
Southmead	

Trent.

Barnsley
Derbyshire (North)
Doncaster
Lincolnshire (North)
Nottingham
Rotherham No reply to initial letter.

Wessex.

Basingstoke & North Hampshire
Dorset (East) No reply to initial letter.
Isle of Wight
Salisbury
Swindon

West Midlands.

Birmingham(Central)
Birmingham(North) No reply to initial letter.
Birmingham(West)
Coventry Replied too late.
Dudley
Kidderminster & District
Sandwell
Solihull
Staffordshire (North)
Walsall
Wolverhampton No reply to initial letter.

Yorkshire.

Airedale
Calderdale
East Yorkshire
Harrogate
Hull
Leeds Western Unable to take part.
Ponterfract
Scunthorpe

Wales.

Clwyd (North) No reply to initial letter.
East Dyfed
Glamorgan (South)
Gwynedd
Powys

APPENDIX 3

A COPY OF THE LETTER ATTACHED TO ALL QUESTIONNAIRES AND SENT TO ALL RESPONDENTS RECEIVING THE QUESTIONNAIRE

Dear Colleague,

Re: Speech and Language Therapy/Teacher Collaboration

Your District Speech Therapist has agreed to pass this questionnaire on to you. I do hope you will be willing to fill it in and return it to me. I enclose a stamped addressed envelope for your convenience.

The questionnaire is about the way speech and language therapists work with teachers. In the Under Fives group this refers to nursery teachers or teachers in special schools where children may enter at 3 years of age.

It is felt that collaboration between these two professions is vital for children with communication problems. I would like to get your views on this matter as part of my own research.

The CLINIC BASED QUESTIONNAIRE (Blue paper) is designed to be completed by those therapists who are based in a health centre/hospital but who go into schools to work with teachers.

The SCHOOL BASED QUESTIONNAIRE (Yellow paper) is designed for those therapists based in schools/units for some or all of their sessions in the week.

Eventually I hope to publish the results of this research in one of our professional journals so that the findings are available to everyone.

Thank you very much for agreeing to complete the questionnaire, please return it to me by :

FRIDAY DECEMBER 4TH 1987

Yours sincerely,

Jannet A. Wright L.C.S.T. M.A.
Lecturer and Clinical Tutor

APPENDIX 4A

**A COPY OF THE QUESTIONNAIRE SENT TO CLINIC BASED THERAPISTS
IT WAS PRINTED ON BLUE PAPER**

SPEECH THERAPIST - TEACHER COLLABORATION

QUESTIONNAIRE FOR THERAPISTS BASED IN A CLINIC

Thank you for agreeing to complete this questionnaire. Your replies will be treated confidentially.

1. How many sessions a week do you work with children ?

--

2. If you specialise with ONE particular client group please indicate below which one

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Language delay		
b) Specific language disorder		
c) Physical handicap		
d) Moderate learning difficulties		
e) Severe learning difficulties		
f) Hearing impairment		
g) Emotional disturbance		
h) Others please specify :		

3. Please indicate which agencies have referred children to you in the past 2 years

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Parents		
b) Headteachers/teachers (Mainstream)		
c) Headteachers/teachers (Special school)		
d) Nursery school staff		
e) Day Nursery Staff		
f) Psychologists - clinical		
- educational		
g) Doctors - G.P.		
- SMO/CMO		
- Hospital based		
h) Health visitors		
i) Audiologist		
j) Physiotherapist		
k) Occupational therapist		
l) Speech therapy colleagues		

4. Are you based in ?

a) A community health clinic	
b) A hospital	
c) A diagnostic/assessment centre	
d) Other, please specify	

5. If a child you are seeing attends a nursery class or school do you ROUTINELY contact the teacher ?
[Contact may happen by telephone, letter or face to face meetings]

a) YES	
b) NO	

6 Please indicate which types of communication problem cause you to contact a child's school

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Language delay		
b) Language disorder		
c) Phonological delay		
d) Phonological disorder		
e) Articulation disorder		
f) Voice disorder		
g) Dysfluency		

In the next section of the questionnaire, I am particularly interested in what actually happens in practice when speech therapists work with teachers. In order to help you think about what you do, choose a child who you began to see 3-4 months ago and answer the following questions with that child in mind.

7. For what reasons does a class teacher contact you ?
[Contact may happen by telephone, letter or face to face meetings]

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) A child is unintelligible to the staff		
b) Staff concerned about a child's speech/language		
c) To ask for a report on a child		
d) To ask about the type of therapy being offered		
e) To ask for advice about the management of a child in class		
f) Other reasons, please specify		

8. When you contact the class teacher concerning a child you see for therapy is it to ?

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Gain more information for own decision making		
b) Explain the child's problem to the teacher		
c) Explain type of therapy offered		
d) Seek teacher's involvement		
e) Seek teacher's support		
f) Others, please specify :		

9. When you visit a school are you usually able to talk to the class teacher ?

- a) YES
b) NO

10. If NO, with whom do you discuss the child ?

- a) The headteacher
b) The special needs teacher
c) Other, please specify :

11. On the first face to face meeting with a class teacher, do you have to fit into the teacher's timetable ?

- a) YES
b) NO

12. Do you talk in ?

- a) The classroom with children present
b) The classroom with children absent
c) A separate room
d) In the staff room
e) In the corridor

13a. How long is your first visit to the school ?

- a) 0 - 10 minutes
- b) 10 - 30 minutes
- c) 30 - 60 minutes
- d) Over 60 minutes

b) Is the time negotiable ?

- a) YES
- b) NO

14. On subsequent visits to the same school, how long do you spend in in discussion with a class teacher about a particular child ?

- a) 0 - 10 minutes
- b) 10 - 30 minutes
- c) 30 - 60 minutes
- d) Over 60 minutes

b) Is this sufficient time ?

- a) YES

--
- b) NO

--

15. Have you worked closely with any teachers ?

- a) YES

--
- b) NO

--

IF NO PLEASE TURN TO QUESTION 22

Think of ONE teacher with whom you have worked. Answer the following questions keeping that working relationship in your mind.

16. Why did you begin working with this teacher, was it because ?

CHILDREN UNDER 5 YEARS CHILDREN BETWEEN 5-11 YEARS

- a) The teacher is the child's class teacher
- b) The teacher sought your help
- c) The teacher was suggested by the Head
- d) The teacher is interested in language
- e) The teacher has an additional qualification in language remediation

17. After the child's speech and language problem was identified, who carried out the assessment ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

18. Is the child's therapy planned by ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

19. Who carries out the therapy ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

20a. Do you see the child for therapy in ?

CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
------------------------------	-----------------------------------

- a) A group
- b) 1-to-1 situation
- c) A group and 1-to-1

b) Why do you work in this way ?

21a. Where do you work with the child if you carry out the therapy ?

- a) In the classroom
- b) In a separate room
- c) In the speech therapy room
- d) In the staff room
- e) In the corridor
- f) In the school hall
- g) In the cloakroom

b) Why do you work in this was ?

When a teacher and speech therapist work together with children who have communication problems, each professional brings different knowledge and skills. The following questions focus on these skills and knowledge.

22. What skills and knowledge do you feel teachers have when working with children who have communication problems ?

23. What skills and knowledge do you, as a speech therapist have when working with children who have communication problems ?

24. What factors do you think contribute to successful collaboration between speech therapists and teachers ?

25. What factors do you think inhibit speech therapist and teacher collaboration ?

26. Is collaboration between speech therapists and teachers important ?

- a) YES
- b) NO

27. If you believe it is important, please state your reasons for this view :

28. If you believe it is not important, please state your reasons for this view :

29a) Has your relationship with teachers changed over the period of time that you have been practising as a speech therapist ?

- a) YES
- b) NO

b) If YES, please state in what way it has changed :

30. What do you think could be done to improve undergraduate training in the area of collaborative work ?

31. How long have you been practising as a therapist ?

32. Please could you indicate how you trained as a therapist

- a) A 3 year degree course
- b) A 4 year degree course
- c) A 3 year diploma course
- d) A 2 year post graduate course

THANK YOU FOR TAKING THE TIME TO FILL IN THIS QUESTIONNAIRE

JANNET A. WRIGHT

NOVEMBER 1987

APPENDIX 4B

A COPY OF THE QUESTIONNAIRE SENT TO SCHOOL BASED THERAPISTS
IT WAS PRINTED ON YELLOW PAPER

SPEECH THERAPIST - TEACHER COLLABORATION

QUESTIONNAIRE FOR THERAPISTS BASED IN A SCHOOL OR UNIT

Thank you for agreeing to complete this questionnaire. Your replies will be treated confidentially.

If you are responsible for more than one school or unit choose ONE school/unit and respond to the questionnaire in relation to that establishment.

1. How many sessions a week do you work with children ?

--

2. If you specialise with ONE particular client group please indicate below which one

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Language delay		
b) Specific language disorder		
c) Physical handicap		
d) Moderate learning difficulties		
e) Severe learning difficulties		
f) Hearing impairment		
g) Emotional disturbance		
h) Others please specify :		

3. Please indicate which agencies have referred children to you in the past 2 years

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Parents		
b) Headteachers/teachers (Mainstream)		
c) Headteachers/teachers (Special school)		
d) Nursery school staff		
e) Day Nursery Staff		
f) Psychologists - clinical		
- educational		
g) Doctors - G.P.		
- SMO/CMO		
- Hospital based		
h) Health visitors		
i) Audiologist		
j) Physiotherapist		
k) Occupational therapist		
l) Speech therapy colleagues		

4a) How many children attend the unit/school/ ?

--

b) How many speech therapists work in the unit/school ?

--

c) Are the speech therapists assigned to certain classes or groups of children ?

CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
------------------------------	-----------------------------------

- a) YES
b) NO

5. How many teachers are there in the unit/school ?

--

In the next section of the questionnaire, I am particularly interested in what actually happens in practice when speech therapists work with teachers. In order to help you think about what you do, choose a child who you began to see 3-4 months ago and answer the following questions with that child in mind.

6. For what reasons does a class teacher contact you ?
[Contact may happen by telephone, letter or face to face meetings]

CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
------------------------------	-----------------------------------

- a) A child is unintelligible to the staff
b) Staff concerned about a child's speech/language
c) To ask for a report on a child
d) To ask about the type of therapy being offered
e) To ask for advice about the management of a child in class
f) Other reasons, please specify

7. When you contact the class teacher concerning a child you see for therapy is it to ?

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Gain more information for own decision making		
b) Explain the child's problem to the teacher		
c) Explain type of therapy offered		
d) Seek teacher's involvement		
e) Seek teacher's support		
f) Others, please specify :		

8. Is your discussion time with a class teacher scheduled in the timetable ?

a) YES	
b) NO	

9. If NO, when do you discuss children of mutual concern ?

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) Before school		
b) At breaktime		
c) At lunch time		
d) After school		

10. Do you talk in ?

	CHILDREN UNDER 5 YEARS	CHILDREN BETWEEN 5-11 YEARS
a) The classroom with children present		
b) The classroom with children absent		
c) A separate room		
d) In the staff room		
e) In the corridor		

11a. How long do you usually spend in discussion with a class teacher about a particular child ?

a) 0 - 10 minutes		
b) 10 - 30 minutes		
c) 30 - 60 minutes		
d) Over 60 minutes		

b) Is this sufficient time ?

a) YES	
b) NO	

12. Have you worked closely with any teachers ?

a) YES	
b) NO	

IF NO PLEASE TURN TO QUESTION 19

Think of ONE teacher with whom you have worked. Answer the following questions keeping that working relationship in your mind.

13. Why did you begin working with this teacher, was it because ?

CHILDREN UNDER 5 YEARS CHILDREN BETWEEN 5-11 YEARS

- a) The teacher is the child's class teacher
- b) The teacher sought your help
- c) The teacher was suggested by the Head
- d) The teacher is interested in language
- e) The teacher has an additional qualification in language remediation

14. After the child's speech and language problem was identified, who carried out the assessment ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

15. Is the child's therapy planned by ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

16. Who carries out the therapy ?

- a) Speech therapist
- b) The teacher
- c) A joint approach
- d) Other, please specify

17a. Do you see the child for therapy in ?

CHILDREN
UNDER
5 YEARS

CHILDREN
BETWEEN
5-11 YEARS

- a) A group
- b) 1-to-1 situation
- c) A group and 1-to-1

b) Why do you work in this way ?

18a. Where do you work with the child if you carry out the therapy ?

- a) In the classroom
- b) In a separate room
- c) In the speech therapy room
- d) In the staff room
- e) In the corridor
- f) In the school hall
- g) In the cloakroom

b) Why do you work in this was ?

When a teacher and speech therapist work together with children who have communication problems, each professional brings different knowledge and skills. The following questions focus on these skills and knowledge.

19. What skills and knowledge do you feel teachers have when working with children who have communication problems ?

20. What skills and knowledge do you, as a speech therapist have when working with children who have communication problems ?

21. What factors do you think contribute to successful collaboration between speech therapists and teachers ?

22. What factors do you think inhibit speech therapist /teacher collaboration ?

23. Is collaboration between speech therapists and teachers important ?

- a) YES
- b) NO

24. If you believe it is important, please state your reasons for this view :

25. If you believe it is not important, please state your reasons for this view :

26a) Has your relationship with teachers changed over the period of time that you have been practising as a speech therapist ?

- a) YES
- b) NO

b) If YES, please state in what way it has changed :

27. What do you think could be done to improve undergraduate training in the area of collaborative work ?

28. How long have you been practising as a therapist ?

29. Please could you indicate how you trained as a therapist

- a) A 3 year degree course
- b) A 4 year degree course
- c) A 3 year diploma course
- d) A 2 year post graduate course

THANK YOU FOR TAKING THE TIME TO FILL IN THIS QUESTIONNAIRE

JANNET A. WRIGHT

NOVEMBER 1987

APPENDIX 5

NUMBER OF QUESTIONNAIRES SENT TO DISTRICT HEALTH AUTHORITIES AS REQUESTED BY THE SPEECH THERAPY MANAGERS AND THE RESPONSE RATE.

[NOTE : the percentage returns are given for interest but as the frequencies are low it only gives a crude indication of response rate.]

KEY = CL.Q.SNT = Clinic based questionnaires sent
 CL.Q.RET = Clinic based questionnaires returned
 SC.Q.SNT = School based questionnaires sent
 SC.Q.RET = School based questionnaires returned

REGIONAL H.A. CL.Q.SNT CL.Q.RET. SC.Q.SNT. SC.Q.RET

North East Thames.

Barking, Havering & Brentwood		3	50%	6		3	50%
Bloomsbury	17	6	35%	10		9	90%
Enfield	7	5	71%	3		2	66%
Essex (N.E)	2	1	50%	2		1	50%
Haringay	6	4	66%	5		1	20%
Newham	8	6	75%	10		9	90%
Southend	9	9	100%	9		5	55%
	55	34	62%	45		30	66%

North West Thames.

Ealing	6	4	66%	8		6	75%
Hertfordshire (E)	0	0	0%	5		5	100%
Hertfordshire (N.W)	5	1	20%	5		2	40%
Hillingdon	1	1	100%	4		1	25%
Paddington & N. Kens.	1	1	100%	0		0	0%
	13	7	53%	22		14	63%

South East Thames.

Brighton	7	5	71%	8		4	50%
Camberwell	11	5	45%	7		6	85%
Kent (S.E)	1	0	0%	1		1	100%
Lewisham & N.	5	2	40%	6		3	50%
Southwark							
Medway	6	6	100%	6		6	100%
	30	18	60%	28		20	71%

South West Thames.

Chichester	4	0	0%	4	2	50%
Kingston & Esher	2	2	100%	4	2	50%
Surrey (East)	4	3	75%	4	3	75%
Surrey (N.W)	9	5	55%	7	3	42%
Surrey (W) & N.E.	10	5	50%	10	7	70%
Hants						
Worthing	4	4	100%	6	4	66%
	33	19	57%	35	21	60%

East Anglia.

Cambridge	9	6	66%	8	4	50%
Huntingdon	10	3	30%	10	5	50%
	19	9	47%	18	9	50%

Mersey.

Macclesfield	1	0	0%	0	0	0%
South Sefton	1	1	100%	2	2	100%
	2	1	50%	2	2	100%

Northern.

Darlington	6	2	33%	1	0	0%
Newcastle upon Tyne	8	6	75%	2	1	50%
Tees (S)	2	1	50%	6	5	83%
Tyneside (S)	3	1	33%	1	0	0%
	19	10	52%	10	6	60%

North Western.

Bolton	8	6	75%	2	2	100%
Lancaster	3	2	66%	4	4	100%
Manchester (Central)	10	2	20%	10	1	10%
Manchester (S)	6	2	30%	9	4	44%
Preston	2	2	100%	4	4	100%
Rochdale	6	6	100%	2	2	100%
Trafford	6	3	50%	6	3	50%
	41	23	56%	37	20	54%

Oxford.

Kettering	8	6	75%	5	4	80%
Northampton	4	3	75%	1	0	0%
Wycombe	0	0	0%	2	1	50%
	12	9	75%	8	5	62%

South Western.

Cornwall & Isles of Scilly	2	1	50%	0	0	0%
Plymouth	12	5	41%	3	3	100%
Somerset	0	0	0%	22	15	68%
Southmead	6	4	66%	4	3	75%
	20	10	50%	29	21	72%

Trent.

Barnsley	3	1	33%	3	3	100%
Derbyshire (N)	6	4	66%	3	2	66%
Doncaster	0	0	0%	5	5	100%
Lincolnshire (N)	10	8	80%	4	4	100%
Nottingham	20	13	65%	11	4	36%
	39	26	66%	26	18	69%

Wessex.

Basingstoke & N. Hampshire	6	5	83%	7	7	100%
Isle of Wight	4	3	75%	4	1	25%
Salisbury	5	3	60%	4	3	75%
Swindon	5	3	60%	5	4	80%
	20	14	70%	20	15	75%

West Midlands.

Birmingham(C.)	11	7	63%	5	3	60%
Birmingham(W)	5	3	60%	1	0	0%
Dudley	7	3	42%	3	3	100%
Kidderminster & District	6	5	83%	2	1	50%
Sandwell	6	5	83%	3	3	100%
Solihull	9	6	66%	3	3	100%
Staffordshire (N)	2	0	0%	2	2	100%
Walsall	10	4	40%	6	5	83%
	56	33	58%	25	20	80%

Yorkshire.

Airedale	9	4	44%	1	1	100%
Calderdale	3	2	66%	3	2	66%
East Yorkshire	0	0	0%	4	2	50%
Harrogate	2	2	100%	0	0	0%
Hull	7	2	28%	1	1	100%
Pontefract	4	3	75%	1	1	100%
Scunthorpe	5	4	80%	0	0	0%
	30	17	56%	10	7	70%

Wales.

East Dyfed	1	1	100%	9	3	33%
Glamorgan(S)	5	4	80%	5	5	100%
Gwynedd	12	2	16%	12	4	33%
Powys	8	2	25%	0	0	0%
	26	9	34%	26	12	46%

APPENDIX 6A

RESPONSES FROM 50 CLINIC BASED SPEECH AND LANGUAGE THERAPISTS TO THE QUESTION ' IF YOU BELIEVE IT (COLLABORATION) IS IMPORTANT, PLEASE STATE YOUR REASONS FOR THIS VIEW ?'

The 50 were selected at random from 235 questionnaires to develop the categories for coding all the responses to this question. They were used in conjunction with 50 which were selected at random from the school based therapists returned questionnaires.

1. Teacher's have more access for continuing remediation programmes in school. Teacher can adapt general class work to encourage the speech and language handicapped.
2. To help child with maximum effect.
3. Remediation of a child's communication problem must include his whole language environment being geared to this effect. This may require change and adjustment on the part of everyone in contact with the child.
4. Communication is important for a child's well being & problems with communication would effect his whole performance at school.
Speech Therapy time is limited - therapy cannot be effective in half an hour.
The exchange of knowledge & expertise is important to help with the child's problems.
5. The teacher deals with the child on a daily basis. It is important for them to have some insight into what the communication problem is and what is the best way of handling this.
The teacher may be able to reinforce some of the work that the therapist has been carrying when listening to the child read or when the child is describing pictures or talking about their 'news'.
6. Extra reinforcement for the child's remediation prog.
eg: help every day, especially if the parents show little interest.
Parents feel it is important that all concerned with the child are trying to help.
Increased knowledge of the child as a whole.
Knowledge of how speech/lang. problem may be effecting reading/writing/social development.
Support for both therapist/teacher.

7. Teachers are an essential back-up to speech therapy even though they may not have the time to work individually with children they can reinforce work when the child is reading to them/telling their news.
8. Although I believe that parents involvement with speech therapy is more important than teachers I still think that the teacher should be involved as they see the child so much. Therapy can be hindered or helped depending on teachers attitude to child in class i.e. they may be over corrected or left out. Specific programmes or sound correction can be continued at school.
9. A teacher spends the majority of their time with a child during his waking hours - communication is a major consideration. The teacher can help to reinforce things being learned in a session. The teacher knows the child's limitations and abilities.
10. Teacher spends much more time with child & can incorporate new speech patterns into classroom activities so there is carry over into everyday speech.
11. In order to educate other professionals in terms of our roles. Our caseloads are high & time to be spent with children is short. I find myself acting more and more in an advisory capacity and this is worrying.
12. Language ability is important to all education & socialisation. Many children here are from ethnic minority groups so collaboration is vital.
13. Greater understanding of communication problems should affect the content of teaching material & techniques used - resulting in long term effects on a child's development.
14. Teachers see more of the child hours wise than the Speech Therapist. Next to the parents the teacher is often the most important person to the child. The teacher is ideally placed to see the child in the social settings as well as educational settings.
15. For the sake of the child: everyone involved with the child should, ideally, work together with a common, well-discussed aim. Chance would be a fine thing !
16. An all round approach to patient management can only be totally successful if all those involved are united & mutually supportive.
17. The child spends much of his/her time at school. A knowledge of his needs in this environment is important effecting a functional outcome. Also the reinforcement

of work in the clinic. Plus explanation of the child's difficulties to the teacher increases her understanding.

18. It allows the teacher to understand why the child is displaying particular problems in class. The child is probably receiving speech therapy for ½ hour a week. If progress is to be made therapy must continue outside clinical visits. The teacher's support can greatly assist doing this.
19. To enable carry over work more successfully into a classroom situation. To enable teacher & therapist to work together and to learn from each other.
20. Understanding of each others aims, maximum progress for a child, especially where work cannot be followed up at home due to lack of time/interest from parents.
21. Important and useful but not necessarily essential Obviously can aid learning and speed - up carry over into outside clinic situations. Should prevent staff in school working on areas in conflict with plans of speech therapist.
22. Teachers on the whole must have more contact with the child and know them better. Carryover of programmes. I feel it is important to know how the child functions in class.
23. The child needs all round help in all environments, so it is important to share awareness of the child's specific needs and ways of helping him.
24. Obviously more can be achieved.
25. The child spends more time at school so for the Speech therapist it is very important to try to make sure that time is not wasted - either for carrying on a programme or maintaining one. If a teacher is frustrated by or concerned about a child's poor language then collaboration can help him/her .
26. Successful collaboration should eventually benefit the particular child involved either directly from speech therapist input or from therapist & teacher or indirectly eg. teacher liaising with parents. Mutual support for teacher & therapist.
27. Child spends a lot of time in school and only about ½ hr a week in speech therapy clinic. Effect of child's communication problem on school work.

28. I believe it is vital that speech therapist and teacher cooperate. Not only because teachers inevitably spend more time with the child & therefore can assist in generalising clinic learned skills. But also because I believe that the only way to effect change is to build strong links between clinic/home/school. In this way common objectives can be set up and a network of support is identified.
29. Speech therapist can assess and create programmes but they do not have the time to carry out the programme. Teachers should be given activities to incorporate into classroom timetables. The teacher has the advantage of being able to work with the child in his natural habitat daily.
30. The child spends considerable time at school with numerous opportunities to communicate in a variety of situations which adds to assessment. The speech therapist must share with the teacher their detailed knowledge of difficulties but needs liaison & collaboration with teachers to see how their difficulties can be dealt with within the context of school.
31. If a child at school has a teacher with knowledge of his speech and language problem that teacher can reinforce therapy techniques.
32. In some families the class teacher has to be co-opted to work on the child's speech in school. In many classes the teacher can include language work in curriculum, thereby aiding all the children in the class. The class teacher has tremendous influence over children, being with them for a large part of the day.
33. Because it helps to improve child's problems & to build up better and more appropriate referral system. Helps with professional recognition of speech therapy.
34. It is important because speech & language difficulties, quite obviously span the two sectors of health and education. For the benefit of the child close co-operation is necessary.
35. To encourage correct management of child/parents & delay/disorder in clinic & schools settings. It can increase carry over & speed up progress if practice/support continues at school.
36. For correct and beneficial management of the child. Back-up in school towards treatment. May also lead to increased referrals of a more appropriate nature.

37. Speech therapy provision has now become too limited to be effective. Therefore other professionals have had to try and take over their role. Ideally - a child can have therapy which is reinforced in the classroom. This rarely happens now.
38. The speech therapist does not feel she has to work in isolation with the child.
Teacher is able to contribute valuable information about child's linguistic skills in the classroom.
Teacher can be of invaluable help in implementing language programmes within the classroom setting or filling out checklists of child's abilities.
Teacher can be informed by the therapist of realistic expectations for child's speech & language development.
Teacher might be able to follow up any direct work being carried out in the clinic.
39. Children need everyone concerned with their daily care, their communication needs, their health, to be working together so we are looking at a whole child.
Professionals need to feel supported by their colleagues - working in isolation is less productive - more limiting
40. Because a child spends a good proportion of the day in school.
41. For the child's needs to be met a holistic approach is required which means that all professionals should be working together.
42. Enables 'whole' view of child. Teacher can carry out homework with child set by speech therapist which improves carry over. Speech therapist's advice can be carried out by teacher during the rest of the week.
43. So that the child gains as much as is possible from the classroom i.e. the language input level is appropriate or in the case of dysfluency the child is not put off by a demanding situation. The child is presented with a more consistent, helpful input.
44. If a child can't be seen in clinic, most work must be done in school.
45. The child spends the majority of time in school, so there should be a carry over. Performance in class is more relevant than performance in clinic.
46. To get maximum benefit for child - educate teacher as to how to manage problems as teacher is with the child the most. Teacher more likely to see child's parents.

47. For improved understanding of child's difficulties. To allay parental fears (in some cases). For maintenance of a consistent approach eg. towards the dysfluent child
48. It is for the child's advantage for all professionals involved to be working in unison & approaching problems in a cohesive way. The parents benefit from feeling that everyone is united in supporting them and helping their child's progress.
49. Everyone concerned with the child has a relevant contribution to make however small.
50. So that as much benefit can be gained from speech therapy input ie. that work can be practised or generalised outside the speech therapy room.

APPENDIX 6B

RESPONSES FROM 50 SCHOOL BASED SPEECH AND LANGUAGE THERAPISTS TO THE QUESTION 'IF YOU BELIEVE IT (COLLABORATION) IS IMPORTANT, PLEASE STATE YOUR REASONS FOR THIS VIEW '

The 50 were selected at random from 208 questionnaires to develop the categories for coding all the responses to this question. They were used in conjunction with 50 which were selected at random from questionnaires returned by the clinic based therapists.

1. In a special school because often roles will overlap and, particularly with the severely handicapped goals may often be the same.
Speech and language work should be incorporated into the child's functioning & part of daily life so speech therapist and teacher should be aware of child's total needs and adopt an integrated approach.
2. The speech therapist does not know everything about the child. The teacher has valuable information about child and opportunities the therapist does not enjoy.
Pooling knowledge, skills, recognising and taking advantage of opportunities for communication is vital for child's development. (Parents need to be an equal partner too)
3. Important for child that everyone involved works together along similar lines.
4. Especially in special schools/units. A common approach ensures best results for child as well as job satisfaction for teacher and therapist because the child is achieving.
5. Between you the child will benefit
6. A teacher's more general training in all areas of a child's education mean that usually they do not have the specific knowledge necessary to deal with communication disorders.
At the same time a speech therapist cannot hope to extend a child's communicative ability by seeing a child once a week, out of its natural communication context.
Therefore collaboration is important.
7. It's important in the service delivery to any child for all professional concerned to know about each area of the child's programme and to work together for the most effective result.

8. It is necessary to achieve more effective treatment for those children who need it.
9. I feel that successful collaboration is vital as speech therapy work without back up and carry over from school will be very much less successful as well as less meaningful to the child creating a situation where various language "tricks" can be learned but not used. I believe that successful collaboration can also enhance both the teachers' and speech therapists' job satisfaction and professional development.
10. It is the only way for a child to achieve optimum progress.
I have limited time but the teacher is with the child every day and thus is able to implement and reinforce programmes. It is also important that the child should not be confused by people working towards different goals.
11. Language and learning can't be separated. Language occupies a central position in intellectual development and social/ emotional development and experience.
12. If speech therapy time is limited then team work is vital. Combined forces equal greater resources of knowledge. Ideally the child needs total therapy all in 1 programme to reduce fragmentation & overlap.
13. For child to achieve as well as possible. For teacher/ speech therapist to enjoy work. For parents/carers to know what is going on and to see improvement
14. Anything less diverts focus of attention from CHILD'S NEEDS to secondary factors.
15. The child will receive most benefit if the teacher and speech therapist are working together in the interests of the child
16. To work to the best interests of child and to make language a part of the complete curriculum and developed through all the subjects and activities that are taking place in the classroom. Not just something that the speech therapist is solely involved in.
17. I cannot be all things to all teachers, parents and children. The speech and language programme has got to be part of the child's curriculum. If this is to be successful then work has to be at right level. No therapy works without carry over.

18. They (teachers) have access to child for most of the day and therefore access to communication situations. They can interact with child in natural situations continually and develop functional communication.
19. The speech therapist only sees the child for a small proportion of the day. The teacher is with the child for a larger part of each day.
For remediation to be effective the teacher (and parents) need to carry out and monitor the language tasks for that child on a daily basis.
20. I feel it is very important for the success of the child's acquisition of speech & language. I have found it is a fragile bridge which has to be built with care. Each teacher being different. Once accepted the therapist can then become a valued member of the school staff.
21. Good working relationship is likely to speed efficiency of intervention. Also easier for future work.
Makes the working day more pleasant. Difficult to do a 'good job' without the support of class teacher in a unit.
22. We cannot treat in isolation - we are dealing with the 'whole' child.
23. In child's best interest. The speech therapist may be best equipped to assess/diagnose child's disorder but the teacher is well placed to carry out programme or remediation - this needs to be part of every day and not a separate activity only practised in the speech therapy room.
24. From the point of view of the child it is important for all those concerned to communicate with each other in order to formulate the best programme for that individual.
25. Without it, therapy given by the therapist in one session will not be reinforced the rest of the week.
Teachers will have a low opinion of the profession and will not refer in future.
26. Because we are both working for the good of the children and we can only achieve this by working together. Pulling in opposite directions only muddles and confuses.
27. Speech therapy time is very limited in my school. Face to face contact with each child is irregular. Therefore if a child is to benefit fully, the teacher has to work with the child as directed by the Speech Therapist.

28. A therapist's time individually with a child is so minimal during a day or a week that to gain carry-over especially in SLD schools there must be collaboration so speech and language work can be implemented throughout the day. If there is no collaboration, there may as well be no speech therapists on site.
29. In my opinion the children who gain most from my time are those where the teacher is genuinely keen to work with me.
The approach to speech & language work is therefore consistent throughout the child's day.
30. A communication problem is with a child throughout the whole day. A teacher spends far more time with the child than the therapist does. Lack of co-operation or understanding of the problems can result in the speech therapist's work being ineffectual.
31. The more we know about how each profession works and thinks the easier working together becomes. The more we work together, the more the children benefit. The more interchangeable our roles become in a small unit like ours the greater the spin-off for everyone.
32. Both professions need support from one another and to continue/carryover each other's work.
33. Teamwork can not be maximally effective (ie. for the child's maximum benefit), unless there is openness and mutual appreciation, time to discuss problems, approaches best results, etc. - and to be seen to do this by the children concerned.
34. To ensure back up of a communication programme right throughout the week, not just by the speech therapist. Consistency of goals for therapist and teacher alike.
35. Maximises the progress the child makes. Maximises the experience and expertise gained by each discipline as the result of the work.
36. We have to keep in mind who we are there for - the CHILD it is therefore incumbent upon both to do as much as possible in setting up, carrying out and evaluating programmes of remediation.
It also has the long term effect of both professions gaining in knowledge and expertise.
37. Because language cannot be viewed in isolation, it affects the child's life throughout each day. During school hours, the child is mostly in the classroom and it is there that treatment should be carried out

continuously, by all adults involved. (In an ideal world one would like to include parents).

38. For the child's progress it is vital, teachers have more access to child's time.
39. It is essential for the speech therapist to understand other significant people's perception of the child's problems, in order to set goals and work together in the child's best interests.
40. It is vital within a language unit, both professionals have a great deal to learn from one another and this leads to most effective help for the children, this is after all the point of it all !
41. Misunderstandings lead to an unhelpful atmosphere in the classroom which is detrimental to the children .
42. This results in greater knowledge of the child and therefore a more comprehensive strategy can be evolved for remediating the problem .
43. Progress will be much slower if the therapist works in isolation. The teacher can back up the work of the therapist within the class situation. The therapist can use topics and similar material to the teacher in order that various aspects can be reinforced systematically.
44. In the end it is the child who is crucial and whose needs should be met. This should be achieved more successfully if the therapist and teacher are aware of their own roles but can offer a consistent and planned approach. More satisfactory for parents if they receive 1 plan for their child rather than conflicting ideas. Support for both teacher & therapist by working together.
45. Language is not just a 'core subject' it needs to be taken into account in all areas such as P.E. etc.
46. It is particularly important to me as I frequently work with children where there is no parental support. So I rely heavily on the teachers to carry out programmes and to do follow up work for reinforcement of therapy.
47. Carry-over of therapy in classroom situation. Involving other members of class in group work. Good relationship between child/teacher can be utilised in planning therapy
48. If there is no collaboration the child usually loses out
49. It is vital that all agencies dealing with a child with a communication problem, especially one aggravated by learning difficulties should be working closely together

for the benefit of the child. It avoids alienating the parents by giving conflicting advice and opinions.

50. Both speech therapist & teacher have skills to offer and collaboration can obviously be of benefit to the child.

APPENDIX 7

INTER CODER AGREEMENTS WHEN CODING THE OPEN QUESTIONS USED IN THE QUESTIONNAIRE

* = a new category which was developed between the 1st and 2nd coder agreement sessions.

AGREEMENT FOR EACH CODE EXPRESSED AS A PERCENTAGES

Why is collaboration between speech therapists and teachers important ?

CODE	CLINIC SLT		SCHOOL SLT	
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Same goals	64%	100%	58%	100%
Pool information	75%	75%	30%	80%
Job satisfaction/professional dev	74%	80%	60%	80%
Effective outcome for the child	51%	75%	78%	80%
Parental satisfaction	75%	75%	75%	75%
* Continuation		100%		100%

What skills and knowledge do teachers have when working with children who have communication problems ?

CODE	CLINIC SLT		SCHOOL SLT	
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
General knowledge of child's dev	80%	80%	67%	70%
Specific knowledge of child's perf	59%	80%	59%	78%
Specialist teaching skills	60%	87%	93%	93%
Reference point of child's peers	70%	70%	40%	80%

What skills and knowledge do speech therapists have when working with children who have communication problems ?

CODE	CLINIC	SLT	SCHOOL	SLT
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Knowledge about comm problems	38%	76%	56%	83%
Knowledge about lang dev/struct.	73%	75%	90%	92%
Assessment skills	79%	79%	94%	96%
Diagnostic skills	64%	90%	57%	83%
Counselling skills	54%	73%	50%	75%
*Intervention skills		100%		100%

What factors contribute to successful collaboration between speech therapists and teachers ?

CODE	CLINIC	SLT	SCHOOL	SLT
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Mutual goals	23%	55%	30%	46%
'Time'	80%	82%	86%	86%
Appreciation of other's knowledge	84%	84%	86%	86%
Regular contact	62%	82%	67%	80%
Perceived level management support	50%	100%	71%	80%
Motivation to work together	76%	76%	59%	78%

What factors inhibit collaboration between speech therapists and teachers ?

CODE	CLINIC	SLT	SCHOOL	SLT
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Mutual goals	60%	60%	60%	60%
'Time'	100%	100%	94%	94%
Appreciation of other's knowledge	84%	84%	72%	72%
Regular contact	40%	88%	67%	100%
Perceived level management support	59%	75%	69%	76%
Motivation to work together	62%	77%	80%	80%

How has your relationship with teachers changed during the time you have been practising as a speech therapist ?

CODE	CLINIC SLT		SCHOOL SLT	
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Know/appreciation of other prof	72%	78%	45%	70%
Changes in own attitude	70%	78%	80%	80%
More comfortable in school setting	57%	86%	67%	75%
Professional changes	71%	78%	68%	81%

What could be done to improve undergraduate training in the area of collaborative work ?

CODE	CLINIC SLT		SCHOOL SLT	
	First and second attempts		Agreement between judges	
	1st	2nd	1st	2nd
Inc. awareness of teacher's skills	62%	76%	59%	90%
Joint course work	50%	100%	53%	75%
Observation of other professional	77%	77%	73%	80%
Clinical practice in ed. settings	67%	85%	50%	80%
Specific presentations	50%	89%	18%	87%
No comment so long since qualified	67%	100%	40%	100%

APPENDIX 8

COPY OF THE INTERVIEW SCHEDULE USED WITH SPEECH AND LANGUAGE THERAPISTS AND TEACHERS IN THE SECOND STAGE OF THE RESEARCH

DATE BEGIN INTERVIEW
CLINIC SCHOOL END INTERVIEW
TEACHER THERAPIST

- 1.1 Could you describe the ways in which you work with/
collaborate with the speech therapist / teacher ?
- 1.2 What does the term ' collaboration ' mean to you ?
Probe re- examples of good/bad collaboration
- 2.1 What are the advantages of working in this way ?
- 2.2 What are the disadvantages of working in this way ?
- 2.3 What are the personal benefits of working WITH the
therapist or teacher ?
- 3.1 If you did not work WITH the therapist or the teacher,
what would you miss most ?
- 4.1 What can you do to help the child that the teacher /
therapist can't ?
Probe - skills/ knowledge to offer
- 5.1 Could you improve upon your working relationship ?
If so, in what way ?
Probe re: criteria for improvement

6.1 If you had a choice now, would you rather be the therapist or the teacher working with a child who has a communication problem ?

6.2 On what grounds would you make that choice ?

7.1 What are/ would be the benefits of being in the same venue/ system as the teacher / therapist ?

7.2 What disadvantages ?

7.3 What are/ would be the benefits of not being in the same venue as the teacher / therapist ?

7.4 What disadvantages ?

8.1 Can you describe how your collaboration with first began to develop ?

8.2 Were there any difficulties when you first began to work together ?

yes.....

no.....

8.3 If so, what were the difficulties and how did you resolve them ?

8.4 If your collaboration is threatened by problems or disagreements now, how do you deal with these ?

9.1 Why do you collaborate with ?

10. How long have you worked together ?

...months

.years

APPENDIX 9

Pairs of interviewees identified by number, the length of time they had worked together, their base and geographical location

A: Speech Therapist; B: Teacher; *: Person contacted first

Pair Profession	Months worked together	Base	Location
1. A	13	Primary Language	Outer London
1. B *	13	Unit	Outer London
2. A *	120	All age S.L.D	Inner London
2. B	120	School	Inner London
3. A *	36	Primary Language	Inner London
3. B	36	Unit	Inner London
4. A	36	Primary Language	Sussex
4. B *	36	Unit	Sussex
5. A *	24	Hospital	Inner London
5. B	24	Primary Language Unit	Inner London
6. A	72	Infant Language	Outer London
6. B *	72	Unit	Outer London
7. A	11	Infant Language	Inner London
7. B *	11	Unit	Inner London
8. A *	11	Community Clinic	Inner London
8. B	11	Infant School	Inner London
9. A *	15	Infant Language	Essex
9. B	15	Unit	Essex
10.A	18	Community Clinic	Outer London
10.B *	18	Primary Language Unit	Outer London
11.A	8	Community Clinic	Herts
11.B *	8	MLD School	Herts
12.A *	3	Community Clinic	Inner London
12.B	3	Junior School	Inner London
13.A *	36	Hospital	Essex
13.B	36	Nursery Class	Essex
14.A *	36	Community Clinic	Outer London
14.B	36	Nursery Class	Outer London
15.A *	3	Community Clinic	Inner London
15.B	3	Junior School	Inner London
16.A	3	Community Clinic	Inner London
16.B *	3	Infant School	Inner London
17.A	3	Community Clinic	Outer London
17.B *	3	Junior School	Outer London
18.A *	3	Community Clinic	Sussex
18.B	3	Infant School	Sussex
19.A	15	Infant Language	Essex
19.B *	15	Unit	Essex
20.A	3	Physically	Herts
20.B *	3	Handicapped School	Herts